DENVDSLATVS SOL TAMEN
A Briefe & Discourse of Bathe.

A DISCOURSE OF BATHE, AND THE HOT WATERS There.

ALSO,

Some Enquiries into the nature of the Water of St. *Vincent*'s Rock, near *Briſtol*; and that of *Caſtle-Cary*.

To which is added,

A Century of Obſervations, more fully declaring the Nature, Property, and diſtinction of the BATHS.

WITH

An Account of the Lives, and Character, of the Phyſicians of *Bathe*.

By *THO. GUIDOTT*, M. B.
Phyſician There.

Virtute vincam Invidiam.

LONDON,
Printed for *Henry Brome* at the *Gun* in St. *Paul*'s *Church-yard*, the Weſt end, 1676.

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Geo. Ent, *Præses.*

D. Whistler Censor.

1265.19

CLARISSIMORUM MEDICORUM *LONDINENSIUM*

COLLEGIO CELEBERRIMO

SPECIATIM VERO

EXCELLENTISSIMO VIRO

D. D. *GEORGIO ENT* EQUITI AURATO

PRÆSIDI DIGNISSIMO

NEC NON

SPECTATISSIMO IV. VIRATUI

D. D. *THOMÆ COX*

D. D. *DANIELI WHISTLER*

D. D. *HUMPHREDO BROOKES*

D. D. *THOMÆ FRANCKLAND*,

CENSORIBUS DOCTISSIMIS

RELIQUISQUE SOCIIS

ERUDITIONE INGENIO SAGACITATE

INSTRUCTISSIMIS

HOC QUICQUID EST NOVI

DE

THERMARUM *BATHONIENSIUM*

NATURA ET VIRIBUS

SUBMISSE OFFERT

T. G.

To the

RIGHT WORSHIPFUL,

And my

Much Honoured Friend,

Sr. *Edward Greaves* Baronet,

Fellow of the Colledge

OF

PHYSICIANS in *London*,

AND

Phyſician in Ordinary

TO HIS

MAJESTY.

Honoured Sir,

THE kind reception you were pleaſed to afford a ſmall Paper of mine, that had lately the honour to have your Name prefixt, hath

hath given this encouragement to preſent to your view, a further Collection of Experiments touching the ſame Subject, relating to the Waters of *Bathe*, a place you were pleaſed once to grace with your Practice, and ſtill with your Favours, for which a more than ordinary reſpect is, in gratitude, your due.

Beſides, Conſidering you have ſo far favoured my late Enquiries, as to aſſiſt me by your preſence, and be an Eye-witneſs of ſome of the Experiments, and are a ſufficient Judge of them all, I could not fix on any fitter than your ſelf, and the Learned Body you have Relation to, to make this Addreſs unto, or give the Trouble of this preſent Dedication.

It hath caus'd me sometimes not a little to admire, That the Metropolitan Waters of all *England* (as I may term Them) to say no more, should lye 2000 years, and it may be much longer, in so narrow a Diocess; for the discovery I have made of many Things relating to Them, (of which in part here is some Account) that were never taken notice of by former Persons, and those few Writers that have Treated of Them, will Justifie the Expression.

The Principles formerly were accounted Sulphur, Copper, Iron, and a little Marcasite; of late, Bitumen, Nitre, and some Sulphur, which last I endeavour to Confirm, with the Addition of many more, which will partly Constitute, and partly evidence the Nature of these Waters:

Waters : Beſides the beneficial diſcovery of the Rational uſe of the Bath-waters in Potion , which hitherto having been but as a good Back-Sword , are now become a Single-Rapier , ready to ſave , and not deſtroy , unleſs ill manag'd by a diſtemper'd hand.

I confeſs I did not think to have appeared in this Dreſs, having deſigned, and in part compleated , as you know very well , ſomething elſe , that would have better ſuited with my Condition, the Dignity of the Subject , and Reputation of Theſe Waters. But finding ſome haſty Chirurgion that hath already launced what I intended ſhould have had a longer Time to digeſt, and expecting, as none but in reaſon muſt , the Pretences of many others , I found my ſelf oblig'd to ap-

appear, though in a careleſs habit, and in a manner undreſt, rather than too much to exerciſe the Patience, if not juſtly incur the Cenſure of thoſe friends, whoſe kindneſs ſhall induce them to give me a Viſit.

And although my Nature inclines me rather to a diffidence, than preſumption on any thing that is my own, yet I muſt be ſo far confident as to believe, that the Exiſtence of Nitre in the Waters of *Bathe*, ſo much queſtion'd by ſome, and my particular Concern, is ſo fully eſtabliſht by the following Experiments, made with my own hands, as to keep thoſe words upright in my late Letter to your ſelf, wherein I aſſert it to be undeniable. And whoever ſhall take the pains to ſatisfie himſelf in that Par-

Particular, as I have done, and ſhall let me know wherein he is diſſatisfied, and can convince me to the Contrary, whom I will aſſure he ſhall not find obſtinate, he ſhall have the Honour, if that be any thing, of making me his Convert, (for I think my ſingle Reputation a ſmall Sacrifice on the Altar of Truth;) but if not, it will appear, which is no great matter on either hand, that ſome Body hath been miſtaken.

However the Satisfaction is not little, nor the Omen bad, that I have already gained the Approbation of a Perſon ſo Judicious as your ſelf, who have formerly taken pains on the ſame Account, and on which ſide ſoever the Scales ſhall turn, I have had this op-

opportunity of doing ſomething to oblige my Countrey, as well as acknowledg my ſelf

Sir,

Your moſt humble

and faithful Servant,

Tho. Guidott.

A PREFACE TO THE READER.

THat the Reader may be acquainted with the occaſion, time, and manner of my making theſe Enquiries (which are not haſty concluſions, but the product of more mature conſideration) I ſhall here premiſe ſomething concerning that, and alſo diſcourſe of, as more pertinent in this place, ſome other matters tending to the enlargement of the Reputation, and uſefulneſs of the Waters.

Taking therefore into conſideration the performances of ſome before me, and the attempts of others, in my time, which were not ſatisfactory, and having the advantages of a more retired nature, and conſtant reſidence on the place, with thoſe Conveniencies which ſome others have not had, I thought it worth my while to employ my leiſure hours in ſome Experiments on

the Waters, which none had done before to any great purpoſe, the Waters having hitherto been rather admir'd than underſtood, if ſo I might give my own Curioſity ſatisfaction in that affair. And indeed, no vain glorious humour of deſiring to be Popular, which I never affected, nor itch to have my Name in print, which hath been already ſufficiently done by the kindneſs of my friends, and therefore needs not any labour of my own again, was the occaſion of my entring on this undertaking; but obſerving the Bath-water was drank by ſome, and probably like to advance, I could not ſatisfie my ſelf in adviſing my Patients to it, unleſs I had firſt made a particular ſearch into what it did contain, it ſeeming as abſurd to me to tell my friends that depended on my judgment for their health and preſervation, they ſhould drink the Bath-water, which I knew nothing of, as to adviſe them to the uſe of ſuch Spirits, Pills, or any other Medicine, I was ignorant of the compoſition of, or had procured from others.

Had I found this done to my hand, I could well have diſpenſed with the confinement and riſque this deſign hath occaſion'd, and ſpent theſe hours I have done in my Study, as chearfully elſewhere, but finding little ſatisfaction in what had been before perform'd, I firſt made collection out of the beſt Mineral Authors, ſuch as Fallopius, Agricola, Baccius, *and others, what was the beſt way to obtain a Sediment out of any Water, and then how to know of what that ſediment did conſiſt, making application of this Theory to the Waters of this place.*

Obſerving then the waies of gaining a Sediment to be chiefly four, Evaporation, Diſtillation, Precipitation, *and* Inſolation, *the laſt, as too laborious, I thought fit to wave, and reſolved on the other three, Evaporating precipitating, and diſtilling firſt ſmall quantities*

of

of all the Baths, which gave me encouragement to proceed to greater.

Having obtained a Sediment, which I call the Contents *of the Water, the very Notion of which was but lately a ſtranger here, I truſted not to my ſingle judgment, but made it known to the beſt Phyſicians of my acquaintance, with whom I had Converſe, particularly my ever honoured friend Sr.* Edward Greaves, *whoſe encouragement to this deſign hath not been little, and alſo addreſſed my ſelf in writing to the very Ingenious and Eminent Doctor* Willis *(whoſe loſs all Ingenious Philoſophers and Phyſicians muſt lament, his many thoughts now dying with him) whoſe aſſiſtance I deſired by Letter dated* 1.Sept.--73, *in theſe words:*

Sir,

THe Acquaintance I had the happineſs to have with you formerly in *Oxon*, and the Civilities you have been pleaſed to confer on me ſince, with the readineſs you have ever expreſt of encouraging all ingenious Inquiries, have emboldened me to give you this Interruption. The deſire alſo I underſtand you have expreſſed to Mr. *Robert Chapman* an Apothecary of this City, of a better account of the Contents of theſe Waters, which hath hitherto I know not how, been too much neglected, and concerning which I have of late made ſome Experiments, hath further encouraged me only at preſent to acquaint you, that about *Michaelmas* next, God willing, I ſhall have a conveniency by a friend of mine, your Neighbour, to ſend you the true Contents of all the Baths apart, which if you pleaſe to examine, and honour me ſo far as to return me your thoughts of the Ingredients, being doubtleſs a

Compounded body, I ſhall with all alacrity and obſequiouſneſs imaginable give you a larger account of my Obſervations, vvhich I forbear to do till you pleaſe to favour me with an Anſwer, that ſo I may not preoccupy your more exact enquiry. The thing it ſelf being of ſo grand import, and ſo well ſuiting with your own genius, I may promiſe my ſelf the greater happineſs in your Correſpondence, &c. which is all the trouble ſhall at this time be given by

Your moſt humble Servant,

T. G.

According to this Letter, I ſent the Doctor what I promiſed, on the 15. *of* October *next enſuing, by my facetious, learned, good friend,* Mr. Alexander Dyer, *with this Letter, which becauſe it contains the rude draught of what I afterwards took more pains about, and not much different from what I now publiſh, I ſhall here inſert.*

Honoured Sir,

HEaring nothing of *Colonel Morgan*, the Perſon I deſigned for conveyance of what I formerly promiſed, I have now met with a convenient opportunity by my vvorthy friend Mr. *Alex. Dyer* to preſent you with as true an Anatomy of the Baths, as my preſent inſpection will permit: *viz.* The Contents of all the Baths, *Kings*, *Croſs* and *Hot*, in Iron and Glaſs Veſſels; the former ℥i. of each, the latter ℥ii. or thereabouts; that in Glaſs being all that one Gallon of the Water of each Bath did afford; the other in Iron, not the whole quantity, but

but ſufficient, I hope, for your ſatisfaction, that came from four Gallons, the *Kings Bath* yielding in Iron, on my firſt Experiment ℥xiiſ; the *Croſs* ℥xii ſs; the *Hot* ℈ix. ℥ii: but on my ſecond Trial performed in the late wet weather, much leſs out of the ſame veſſel, and quantity of water, which may ſuggeſt ſomething to Enquiry if I find it hold. But uſually out of 4 Gallons in a Veſſel of mixt Mettal, I commonly evaporate it in, I have ℈i. out of a gallon of all the Baths alike, ſo that I judge about ℥ii. to be the common proportion out of a gallon the Water will afford.

Now of theſe ℥ii, as I ſuppoſe, you will eaſily diſcover all is not Salt, but according to my beſt obſervation I find a third part only Saline, or ℥ii. in ℥ii: the reſidue, which I have ſent under the name of *Reſiduum Sedimenti non Salinum*, will not relent but continues of a gritty nature, and I ſuppoſe, conſiſts of two different ſubſtances.

The *Oebre* ariſeth in a large quantity, where the ſtream of the Bath meets with any reſiſtance; but what I am not ſo fully ſatisfied in for the preſent is, that though ſo much continually is breathed out of the water, nothing yellow is diſcovered in the Contents.

The *Oleum Salis Thermarum per deliquium*, is only that Salt I have ſent you by the name of *Sal Thermarum* relented in the air, and cleanſed from impurities that will ſubſide, but tincted greeniſh by a touch of Copper it met with in extracting, when otherwiſe the true colour is more inclining to Amber.

One thing more alſo I think fit to advertiſe you of, that in Glaſs Veſſels there is a thin cruſt in the outſide covering that part that is moſt Saline, as thin as the thinneſt Wafer, but not Salt at all,

which I have cauſed to be ſeparated in the Contents of the *Hot Bath*, and put in a diſtinct glaſs containing ℥i. gr. 10; this more flakey and much leſs, if at all Saline, being only ℥ii. gr. 14. The *Kings* and *Croſs Bath* are alike, mixed here in one glaſs, only the *Hoth Bath* ſeparated for your further ſatisfaction.

You have alſo the Sand, Mud, and Scum, in Boxes by themſelves, all which I ſubmit to your more exact ſcrutiny what names to call theſe by, which is the grand thing in queſtion, and *on which will be built, as I conceive, the trueſt Hypotheſis of the Nature and Vertues of theſe Waters that hath yet been given, and much different from what hath hitherto been ſuppoſed and preſumed on.*

I hope to have the honour of a few lines from you, what your thoughts are of the nature of theſe particulars, vvhich vvill be very acceptable to

Sir,

Your obliged humble Servant,

THO. GUIDOTT.

Poſtſcript.

IN an ordinary infuſion of any of the Contents in Common Water, you will obſerve a white gritty ſubſtance, which will harden into a ſtone in the bottom of the glaſs, one of which I have ſent in the Box containing Sedimentum non Salinum; *above that a blewiſh light, and more dirty ſubſtance; then the Salt in the Water to which it gives a yellow tincture.*

The

The Doctors business being much on other accounts, I cannot understand he did any thing in this, only in a Latin Letter he had occasion to write me not long after, on the account of an Honourable Patient, for whom we then were both concern'd he takes a very kind notice of my Letters, and Experiments, and gives me thanks in this expression, Clarissime Domine, Multum Tibi debeo pro Litteris & Experimentis Tuis circa Aquas Thermales mihi jam pridem missis, quæ officia Tua ut gratissima habeo, ita compensare studebo; *but sent me no other satisfaction.*

A little after, having an opportunity of obtaining the Contents of many Hogsheads of the Water, I wrought them all of, and came to an exact separation and distinction of Particulars, as expressed in the Observations hereunto annexed, and as occasion served, communicated my Experiments to my Honoured friends, the Learned and accomplisht Sr. Charles Scarborough, *Doctor* Thomas Witherley, *Dr.* Nathaniel Highmore, *and Dr.* Thomas Harbech. *This I think is sufficient to take off the surmise of Singularity, if any such thing by chance should be thought upon.*

And here I cannot but admire how a Judicious man should be so far imposed on by any person whatsoever, as to imagine, that a satisfactory enquiry into the nature of these Waters was so nice a speculation, as to be inconvenient *or* useless [*according to these words*, I have been desirous heretofore to have attempted some discovery of our Baths, according to those Principles: but being thought (by some) either not convenient, or not useful, I was willing to save my labour, which perhaps might have seemed not to be worth thanks.] *For, what can be more necessary, and therefore useful and convenient too, than to know the Principles of any Water we recommend our Patients to? and what did all the Mineral* Jord. N. of Bath, c. 17 in fin. p. 347.

Writers that treated of such Waters before him whose authority he uses, but either make such enquiries, or speak by guess? and which of these two is the more useful or convenient, is easily determin'd.

Besides, by this means we act as rational Physicians, and free the Baths and Mineral Waters from that aspersion they labour under, of being accounted Empirical Medicines, whereas they are the exact composition of the best Physician, and perform their operations by virtue of the Ingredients they consist of, and the blessing of God Almighty, as all other good Medicines and Prescriptions do.

Moreover, this way we can better judge of the reason of the effects, which without this, perplex the understanding with an ignorant admiration, and we prove no better than the ordinary Spectators at a Puppet-play, who admire the motions, but know nothing of the hand within that occasions them.

I confess indeed, his thinking his pains might not have deserved thanks, *might somewhat discourage him; but a man of Resolution would have considered that things of this kind, subjected to publick view, would fall either into the hands of understanding, generous and unbiast persons, or else ignorant, self-interested, and narrow Souls: the former ever have been, and will be ever ready to give what encouragement ingenuity shall deserve; and for the other, they are not much to be regarded, being best brought to a knowledge of themselves by an understanding of their errors; and as their mouths are no slanders, so their thanks are but slender, if any, commendations. And thanks be to God for it, there have been and now are many worthy, brave, and generous Spirits in this our Nation, who can discern and make distinction 'twixt things that differ, else bad would be the condition of those that have broken through that opposition at*

which

which others have boggled, and think it no disparagement to undergo rude Censures from the ruder multitude, in prosecution of a design for publick advantage.

Although the Credit of the Waters hath been preserved by Bathing, and advanced by Drinking, especially these two Summers last past, yet a far greater degree of Reputation may be acquired, by a more particular account of the more remarkable Cures that are annually wrought principally thereby; which being digested into the nature of a Register, would mightily conduce to the satisfaction of those that seek remedy here in the like distempers. And although I have endeavoured what in me lay to promote so necessary a good work, yet such is the stupidity of some to things of their own advantage, that nothing of this nature hath yet been performed, although recommended by the learned Doctor Jorden, *then practising on the place, and often inculcated, though with like success, by my self: So that to the wonderful honour of those on whom it must reflect, the Waters have been more beholding to the gratitude of Forreigners in registring their own Cases, than to the care and duty of those that are at home. I shall instance in the Case of Sr.* Humphrey Lloyd, *who having received a hurt in his Hip, by the kick of a horse in* Milain, *was grievously afflicted with a Sciatica for a twelve months time, and after having made use of much Physick, from several Physicians, to little purpose, in only six daies using these Waters was perfectly recovered. His words are these;* Alia Belgarum urbs, *Ptolomæo*, Aquæ Calidæ; *Antonino*, Aquæ Solis; *Britannis*, Caer Badon; & *Anglis*, *Bathe* dicitur, Balneis Aquarum Calidarum saluberrimis clara; Cujus rei ego certissimus testis esse possum. Nam cùm ex ictu equi Mediolano, in *Italia*, excepto, dolore Schiatico duodecim continuis mensibus laborarem, diversisque

N.B. Ch. 18. in fin. p. 163.

Fragm. Descr. Brit. p. 16.

diverſiſque Doctiſſimorum Medicorum auxiliis non convaleſcerem, his Balneis, cum tantum ſex diebus uſus eſſem, ſanitati priſtinæ reſtitutus ſum.

And that I may mention one freſh in the memory of all, whoſe gratitude in this kind deſerves a remembrance. Mr. John Revet, *an aged man, hath very lately publickly teſtified his cure of an* Hemiplegia, *in 2 months bathing, by an Inſcription round a very fair Braſs ring, on the right hand of the Entrance into the Queens Bath out of the Kings, after this manner*; Thanks to God. I *John Revet* his Majeſties Brazier, at 56 years of age, in this preſent month of *July* 1674, in this place recovered a cure of health and limbs, of the *Dead Palſey*, on one ſide, from head to foot.

That this way of Regiſtring of Cures was alſo thought neceſſary, and recommended before the time of Dr. Jorden, *may appear from the words of Mr.* Jones, *an honeſt* Cambrobritan *(whoſe authority I am conſtrained to make often uſe of in the following diſcourſe, in regard he is the only man that hath treated any thing largely of theſe Waters,) which I recite as they are, being the plain words of an honeſt meaning man.* I wiſh *faith he* that you leave a Note of the Commodity received, and a knowledge of your condition and calling in the Records of the Mayor of the City, where it ſhall be regiſtred, until a Phyſician be appointed, who then ſhall be joyned with the Mayor, paying to the Poor-man's Box, and 4 pence for Regiſtring your benefit received there. [*And in another place*,] Alway provided the day of your coming thither be noted before you enter into the Baths, and the day of your departure, with the Country of your habitation, condition, or calling, with the Infirmities or cauſe you came for, in the Regiſter book kept of the Warden of the Bath,

Bathes Aid, *lib.* 4. *fol.* 33.

Buxtons Benefit, *fol.* 22.

or

or the Phyſician that there ſhall be appointed, and the benefit you received, paying four pence for the Recording. *This Regiſter may be ſo contriv'd as that the Patients name, or only letters thereof, as ſhall be thought expedient, with thir place of reſidence, diſtemper, and time of uſing the Waters, may be expreſt in ſhort; a model whereof, in many inſtances, we have in* Jo. Bauhinus *de Aquis* Bollenſibus, *lib.* 1. *cap.* 17.

And whereas mention is here made of the Poorman's Box, it gives me a good occaſion to remind this Age, of what prudent and charitable diſpoſition the former Age was, in which for the neceſſary ſupport of the many Poor that came hither for relief, (now ſufficiently numerous, and burthenſom too) Reparations and Conveniences of the Bath, and other good uſes, a Tax, or Pole-bill was made, and willingly conſented to by the uſers of ſuch Waters, by which a certain reaſonable rate, or ſum, was required of every man or woman of all conditions, from a Duke to a Yeoman, by which all Clamours, now too frequent, were prevented, and all occaſions of Exactions taken away, no perſon paying, or requiring more than what was commonly known to be their due, reſerving their Gratuities to diſpoſe of as they pleaſe. The mony collected to be put into the Treaſury of the Bath, and intruſted in the hands of one or two honeſt and ſufficient perſons, who ſhould every Michaelmas *give up their Accounts, and diſpoſe of good part of the mony chiefly to the uſe of the poor abroad that come with good Certificates, or accounts of their condition, to be approved of by competent Judges in this caſe, and other neceſſary, good, and charitable uſes, as ſhall be thought requiſite; provided the Baths, Pumps, or any of their appurtenances be ſupply'd, and kept in good order and repair. And this was never intended in any violent or compulſory way, but only as a fair propoſal*

posal to the better dispos'd persons, who by their good example, and readiness to comply in this particular, may have an efficacious influence on the more captious and excepting, to beget in them a better understanding of this charitable, and orderly design.

Neither can this Tax in reason be imagin'd to be prejudicial to the Waters, as some others are reported to have been; on the imposition of which the Waters are said to have lost their virtue: for however the truth of such stories may be admitted, which are deliver'd by credible Authors, and I cannot contradict, yet certain it is, that if any such thing ever happen'd, it was either on the restraint of a publick resort, by denying Poor people the use of the Waters, or else by an Impost collected by the Officers of the Prince to his private advantage; whereas this is only to prevent exactions, and moral abuses, between man and man, and the Poor rather hence to be relieved than exacted of, with a probability of a much greater resort that will be procured by a reasonable demand, and good order withal.

The overplus of this Collection, if rightly manag'd, and the years prove lucky, may in a short time, make a purse for the covering one or two of the Baths also, whereby the Waters would be rendred useful all the year, which by reason of the coldness of the ambient Air, and fear of injury thereby, and no other, are thought not so fit to be used in the Winter season, the Waters then being as effectual as in Summer.

And this would be agreeable to the use and custom of most of the Baths in Europe *which are cover'd, and thought by the best Physicians to be a meant of keeping the Waters to an even Temper, being an equal defence against the wind and cold of the Winter, and the troublesom heat of the Sun in Summer; so that nothing external causing alteration supervening, the*

benefit

benefit of the Waters may be ſafely received from the first of January, *to the last of* December, *which would be much for the relief of thoſe infirm perſons that require a longer ſtay than ordinary here, and by their ſo long abſence from the Bath, do but weave* Penelope's *web, undoing in the Winter, what is done in Summer; whereas if they did in this manner, as we ſay, follow their blows, they probably would not only prevent a relapſe, but ſet themſelves in a way of perfect recovery with one reſolution, without many comings at ſeveral ſeaſons, being many times not ſo well at their ſecond coming, as they went away on their firſt ſeaſon of bathing.*

For this uſe I think the Queens Bath moſt convenient, both in regard it is but ſmall, and alſo more eſpecially for the conveniences of the Slips, and Houſes about it, where it is almoſt no more than out of Bath, into Bed; and if well cover'd, and care taken in riſing, may be as well as if a man made uſe of a Bath in his own houſe or Chamber where he lies. After which the Croſs Bath may follow, if it be thought fit, the Kings, and Hot, being kept open ſtill.

But againſt this I foreſee two Objections will be made. Firſt, That it will be inconvenient in the Summer time to ſit ſo cloſe, if no offence doth ariſe from the ſteam. *And, Secondly,* That it will be injurious to the Lights about the Bath.

To the firſt, I anſwer generally; That thoſe perſons that deſire good, will think nothing an inconvenience that is in order to it, and thoſe that come for pleaſure may be ſomewhere elſe; yet that it may appear to be made out ſome other way, I ſuppoſe the increaſe of Heat, which ſometimes that Bath wants, procured by keeping the Air out, and the ſteam in great meaſure in, (which yet will not be more than

will

will well be endured) will make a ſufficient recompence for this ſuppoſed moleſtation. And as for the Steam, a vent hole, or Tunnel at the top, will ſo diſcharge, that it may not be offenſive or troubleſome at all.

As to the Lights, the Croſs Bath will certainly inconvenience none, and the Queens may be ſo contriv'd, if made flat, as to do the ſame but if built more erect for gaining room below, there will be but a very little blind, or perhaps none at all, to the lower Windows on the Hart *lodging ſide, which houſe, by reaſon of the accommodation of the Slip thereunto belonging, being, in all probability, likely to partake moſt of the profit, may contribute a little in this kind. But to avoid all exception, the Cover may be ſo made with ſhutters on a Timber frame, that it may be eaſily taken off if there be occaſion, and as ſoon cloſed up again, if neceſſity ſhall require.*

One thing more I ſhall only add, which as a means to eſtabliſh greater order and content, with ſubmiſſion to more political judgments, I here propoſe, That I conceive that the perſons having dependance more immediately on the Bath, may be better paid by Salaries, than the Nunquam-ſatis-arbitrary *way now on foot; That their number may be leſſen'd, being by that reaſon, and (the conſequent thereof) their neceſſity, only ſuch as repine at now, and prey one upon another; and that two Serjeants, four able men to manage the Pumps, and cleanſe the Baths, four Women to introduce and place the Females; with twelve Chair-men, may be ſufficient. The Salaries to be paid them by the Officer in chief, collected by the Serjeant, and raiſed by a moderate demand by the Pole from the Uſers of the Waters, according to their conditions, quality, and time of ſtay at the Bath, expreſſed in a Table for that purpoſe mentioned before; and if any*

other

other clamorous demands, uncivil deportment, neglect, or want of duty, should at any time happen in those Servants; upon complaint made, to be animadverted on, suspended, or discharged by the Authority under which they are. These things some may make light of, but the Prudent will consider.

T. G.

THE

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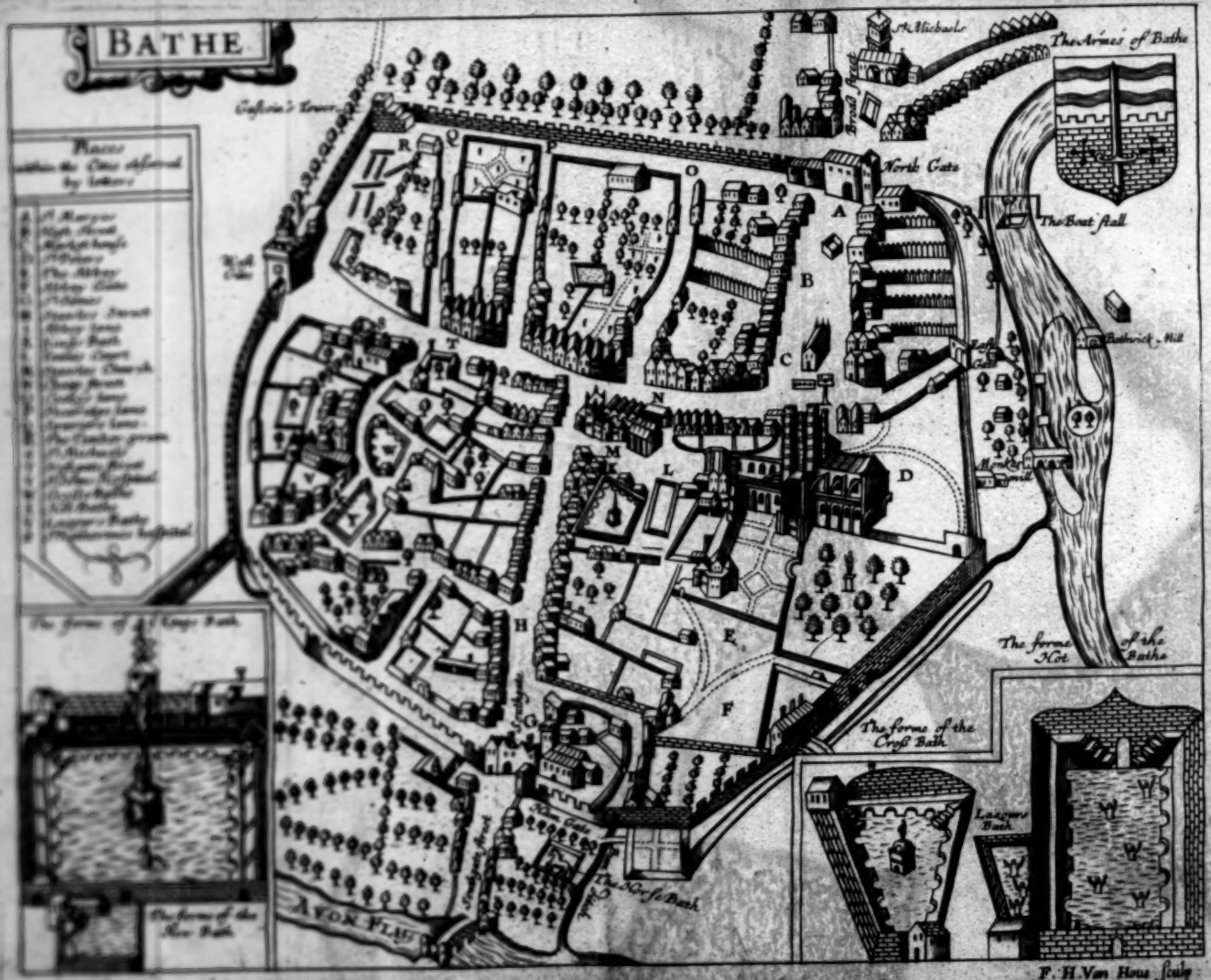
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CHAP. I.

The Introduction.

HAving formerly, in the year 1668, annexed a brief discourse of *Bathe* to one of Doctor *Jorden*'s of Natural Bathes and Mineral Waters, under the name of an *Appendix concerning Bathe*, by which and some other pains I had taken about the Treatise it self, I thought I had obliged (as was the opinion of most) not only the Relations of the deceased Author, but all his Friends and Well-wishers; but meeting, contrary to all expectation, with rude and unhandsom returns from an Impudent person, to

whose Temper the modest Doctour was a great stranger, and of whose behaviour he would be much asham'd, were he now alive; who on his pretended relation hath repaid me with ill language, and foolishly threatned me with Trouble for my good will. Now to put an end to all disputes of this kind, I have thought fit to appeal to any understanding person, that hath his senses exercised, and his wits about him, (for all have not, and some have none at all) whether my Additions have been any impair to the Doctor's Reputation, whom I have treated with all the Civility imaginable; and for the Sale of the Book (a good argument of its acceptance) I believe there were not more sold in the Doctor's life time, of what he printed himself, than went off the first year of my Impression. But to silence all Cavils and silly Objections of this nature, I have discharged that Author, and published in this discourse my own thoughts and Observations, and how much different they are from his, or agreeable to Truth, may best be determin'd by the ingenious Reader.

I did intend indeed, according to my Promise in the end of my Preface to the Edition of Dr. *Jorden*, to have amplified that small discourse into an *History of Bathe*; but finding no encouragement since to that design, and many things that have made me alter my resolution, my intentions are to wave that, and apply my self, in some convenient time, to the *Roman Court*, where I shall have a fairer Trial, and more Justice done me. In the mean time, I hope this may in some measure stop the gap, and release me of my obligation to the Candid world; especially considering that the Antiquities of the Baths and City can hardly, I think, be improved higher, and the Mystery of the Sacred Waters of *Minerva*, is not

to

to be profan'd, which it wants little of if idly prostituted to vulgar Capacities; which, besides that they are incompetent Judges in other matters, are apt to put a siniſter interpretation on thoſe very things, that really are, and were ſo intended for their own advantage; neither had I publiſhed the Obſervations I now do in this language, had it not been on a more particular account.

The ill Uſages and great Indignities I have already met withal, from an ungrateful people, in the proſecution of my deſign of making further Enquiries into the Nature of thoſe Waters, are not here to be mentioned; they are ſufficiently known to be products of Envy and Malice, and as I have hitherto contemned what pitiful oppoſition could be made againſt me by the united ſtrength of Envy, Pride, Beggery and Revenge; ſo I ſhall not ſurceaſe my Thoughts in due time of perfoſming that which will be better eſteem'd by more Judicious perſons, and render me and my deſign moſt acceptable when beſt underſtood. It was a fit return of a grave Divine to a vainglorious oppoſer of his good Inclinations, *Nec propter Te cepi, nec propter Te deſinam. Thou, Satan,* ſaid he, *haſt nothing to do with my Concerns, for thou art at neither end of my deſign; and as I did not begin to do thee a kindneſs, ſo I will continue notwithſtanding thy rage.* Such unclean Spirits have no more to do with publick affairs, than to interrupt the quiet of better than themſelves; and are like a troubleſom Curr on the Road, that doth little elſe, with a beſom tail and a whiffling bark, than make a man well mounted look back, his horſe kick, and ſo returns.

It hath ever been the fate of New Diſcoveries to meet with Courſe entertainment at their firſt appearance; and whereas men are uſually courteous

and civilly demean'd to ſtrange Perſons, they treat ſtrange Opinions and new Inventions at another rate. 'Tis the only Policy accounted to keep a ballance among men, and if any one by a more than ordinary induſtry and God's bleſſing on it, hath made at any time a conqueſt in the Intellectual world, whereby 'tis thought he may get the ſtart of his Neighbours, a rotten *Cabal* ſhall make head againſt him, and perhaps, uſe him with as much ſeverity as a forceable Intruder on another's right; whereas the Secrets of Nature are free to all, and the Victor here enters not by Blood, and Rapine, and Tyrannical oppreſſion, but in a way both innocent in it ſelf, and advantagious to others.

When I reflect on the hard meaſure the Renowned Dr. *Harvey* met withal from the pride and peeviſhness of ſome conceited Brethren (who eſteem nothing Currant but what bears their image and ſuperſcription, if not minted in their own brain) on his firſt demonſtration of the Circulation to the World, I cannot but conclude, if I had no other inſtance for it, That neither Ingenuity, Learning, Modeſty, nor any thing that is good and truly valuable can give protection from, though a ſufficient antidote againſt, the poyſon of Envy; *Envy*, that ſpreading Ring-worm, that *Ubiquitarian* infection, that Canker of what is ſound, and Ruſt of what is bright! to be found almoſt in all places, in Town and in Country, in the Shop and in the Street, in the Tavern and in the Ale-houſe; it hovers over all, and pitches where it can, till at laſt, if it hurt not others, it preys upon it ſelf:

Thou wicked Fiend! that ne'r didſt good,
But hatt perverſly it withſtood,
And ever will, till Time ſhall be
No more, or We
Be rid of Thee.

But

But to pass by things of this nature with that of the unconcerned *Grecian* to as abusive persons, Ἔξεστι κλαζομβίοις ἀγωνῶν; or that of *Tacitus*, *Convitia spreta exolescunt*, the best answer being nothing at all; I shall rather chuse to acquaint the Reader, That whereas I conceive, when I writ my Letter of Observations, that *Bitumen* and *Sulphur* were not primarily concern'd in the Body of the Waters, and therefore no way observable in the Contents; by fresher Experiments and Observations of a later date, I am inclin'd to believe, that *Sulphur* is one ingredient in the Contents of the Waters, though not proportionable in quantity to the Salts, and lost in the bringing them to a better colour. For if two or three ounces of the Contents, which at first much resemble the courser sort of Sugar, be put into a Crucible in order to fusion, when the Crucible is red, and before the Salt doth run, there is the perfect colour and smell of Brimstone, insomuch that it may be sensibly discerned in any part of the room, and as the Salt draws nearer the state of Fusion, the Sulphur wasts and is diminished; so that as dross or Recrement it burns off in Calcination, and is no way concerned in the refined Salt, though one Ingredient in the Waters, and contained in their body.

I shall further add, that I made a *Lixivium* of the Salt calcin'd before fusion, when probably the Sulphurous parts, or so reputed, were not all consum'd, and observ'd so great a *fœtor* in the *Lixivium* representing Sulphur so effectually to my smell, that it presently obtain'd the Testimony (if that be any thing) of that sense.

CHAP. II.

The Opinion of a late Author concerning the Nature of the Baths of Bathe.

Joh. Mayow LL. D. & Med.

AND here I cannot but take notice of a Novel Writer, who Magiſterially thus determines: *Quod ad Nitrum & Sulphur attinet, quibus Thermas Bathonienſes imbutas eſſe hactenus creditum eſt, eorum neutrum Aquis Thermarum iſtarum ſolutum eſſe arbitror: As to what concerns Nitre and Sulphur, with which the Baths of Bathe have hitherto been thought to be impregnated, I ſuppoſe there is nothing of either of them diſſolved in the Waters.*

A bold aſſertion! which had it been vented and believed but 50 years ago, would have prevented much trouble in evincing the contrary; but, ſince 'tis in faſhion to be peremptory, I do aſſert, *That both Nitre and Sulphur are to be found in all the Bathes of Bathe, and that diſſolved in, and mixed with, the Body of the Waters.* In order to the Proof of which, I ſhall take ſome account of the forementioned Author's 15th. Chapter of his Tract of Sal-Nitre, the arguments he hath againſt it, and his opinion to the contrary.

His words therefore, as well as I can tranſlate them, are theſe:

"Among the moſt celebrated Bathes, we may "juſtly reckon thoſe of *Bathe*, in which admirable "Waters, a continual Veſtal and ſacred Fire is "maintain'd, as if things of a moſt different na- "ture were interleagu'd. Before I come to the "manner how theſe Bathes receive their Heat, it "will not be improper if I make ſome enquiry into "the Contents of theſe Waters. "It

"It is therefore manifest, that the Bathes of *Bathe* "are impregnated with a certain Salt of an acid na- "ture, for if any Sal alkali, or volatil Salt purely "salin'd, be mixed with these Waters, a precipita- "tion will ensue, and the Waters will become tur- "bid, and of a milky nature.

"Moreover, The *Bathe*-water powred on boyl- "ing Milk, will coagulate it, as any other acid "doth.

"Neither doth this acid Salt seem to be the only "Salt of the *Bathe*, but is complicated with an Al- "kali; for if the Water be evaporated quite away, "a certain Salt of a more fixt nature will be found "in the bottom of the vessel, which, on the powr- "ing of any acid on it, will ferment.

"Of the same nature also are the Mud and Sand "of the Bathe, which are wrought up with the "Springs; for any acid liquor being powred on "them, an Ebullition will follow.

"There may be also observed in these Waters a "Salt, or rather a Lime-Chalk kind of Earth, "sticking to the bottom of the Gouts, or passages, "almost in all places where the Water passeth.

"From what hath been said may be collected; "That the Bathes of *Bathe* are impregnated with a "certain acid saline Salt, and the Salt of the Bathe "seems not much unlike Tartar vitriolated, or "Aluminous Salt.

"The Reason why these Salts destroy not one "another, but each of them ferments with its con- "trary Salt; may be understood from what hath "been delivered in the former Chapter: To wit; "These Salts are so imperfect, that in Conjunction "they cannot destroy one another. But more of "these Salts, hereafter.

"As to Nitre and Sulphur, with which the Bathes

" have hitherto been thought to participate, I ſup-
" poſe, That neither of them is diſſolv'd in thoſe
" Waters.

" That there is no Nitre in the Waters appears
" by this, That the Salts that remain after the Eva-
" poration of the Bathe-water, put on a Coal, burn
" not, as Nitre doth. Although I ſhall not deny,
" that thoſe immature Salts of an Alkali nature,
" (which are alſo contained in the Sand, and * Mud
" of the Bathe) being expos'd ſometime to the
" air, may, perhaps, by its influence be converted
" into Nitre.

* If that be meant by *Fimus* in the Author, to expreſs which, *Limus* or *Lutum* had been more proper.

" As to Sulphur, which hath been ſo much re-
" ported to be in all Bathes, 'tis not, I believe,
" diſſolved in theſe Waters. Becauſe,

" If a Solution of Alom, Vitriol, or any other
" Salt, whether acid, or fixt, be mixed with the
" Water of the Bathe, Sulphur diſcovers not it ſelf
" to be precipitated, either by a fetid ſmell, or any
" other ſign; which notwithſtanding in the Soluti-
" on of Sulphur in the water of unſlak't Lime,
" or made into a Lixivium, doth appear, where
" the Sulphur by the affuſion of any acid Liquor is
" precipitated.

" I am not ignorant that the Water of theſe
" Bathes, if Salt of Tartar, or a purely vola-
" til Salt, be caſt into it, will preſently turn white,
" as is declared before; which colour proceeds not
" from Sulphur, but a ſtony, or Aluminous matter
" precipitated, not much unlike to what is obſerved
" in the Water of unſlak't Lime, when any fixt
" Salt is mixed therewith; in which notwithſtand-
" ing it is not to be ſuppoſed the Sulphur is diſſolv-
" ed; for if Sulphur be boyled in Water of un-
" ſlak't Lime, the Water becomes white, not by
" the affuſion of a fixt Salt, as before, but of an
" acid;

" acid; ſo that fixt Salts may diſſolve Sulphur,
" but not precipitate it. Wherefore if Sulphur be
" contained in the Waters of the Bathe, they would
" be precipitated, not by a purely ſaline, as former-
" ly, but an acid Salt, and the Sulphur ſo precipi-
" tated would diſcover it ſelf by a fetid ſmell,
" which it doth not do.

" To which I add, That an acid Salt, or ſome-
" thing Aluminous, doth ſeem to predominate in
" the Bathes aforeſaid, ſo that they become altoge-
" ther unfit to diſſolve the Sulphur.

" Moreover, If Common Sulphur be boyled in
" thoſe Waters, they are never tinged with a yellow
" or Sulphurous colour, neither can Sulphur, by
" any means, be precipitated from the decoction,
" as I have often experimented.

" And therefore I much admire the famous *Wil-*
" *lis*, in his Treatiſe of the heat of the Blood,
" ſhould affirm, That Sulphur boyled in Bathe-wa-
" ter may be diſſolved after the ſame manner, as if
" boyled in Water of unſlak't Lime.

" Now if Sulphur ſeems to be diſſolved in the
" Waters aforeſaid, the occaſion of the miſtake, I
" ſuppoſe to be, That the decoction was made in a
" veſſel, in which ſome fixt Salt had been decocted,
" ſo that the Solution of the Sulphur may be made
" by ſome particle of a fixt Salt, with which the
" veſſel might be ſeaſon'd.

" Concerning the Baths of *Bathe*, 'Tis the com-
" mon Opinion that Silver dipped into them is co-
" loured yellow, in the ſame manner as if it were
" caſt into a Solution of Sulphur, and hence it is
" ſuppoſed that the Baths have Sulphur in them;
" but experience evinceth the contrary; for Silver
" put into the Bath-water becomes not reddiſh, or
" yellow, but rather black.

" The

" The mistake may seem to arise from this, That " 'tis customary with the Bathe-Guids to tinge, " and as it were guild over pieces of Silver with a " Salino-Sulphurous Mud, or Dung, such as is " often found in houses of Office, and put them off " to Strangers, for a little profit, as if they were " coloured with the Bathe-water.

" And here this is to be noted, That a kind of " Bituminous Mud, with a small pittance of Com- " mon Sulphur, is brought up with the Springs, " which only swims on the top, or else continues at " the bottom, but never is dissolved in the Waters " themselves.

" Neither is Sal Armoniack, as some imagine, " to be found in these Waters; for if on the So- " lution of Sal Armoniack, Salt of Tartar be in- " jected, the purely saline volatil Salt (of which " Sal Armoniack in part doth consist) being at li- " berty from the acid Salt, to which it was former- " ly united, will presently fly off into the air, and " will quickly be discover'd by a pungent affecting " the nostrils, which is never observ'd in the Bathe- " waters.

" Lastly; As to Vitriol, the Crosse and Hot " Bathe seem to have none at all; for if Galls are " beaten, and infused in these Waters, they nei- " ther turn purple nor black; which would cer- " tainly be, if these Waters had Vitriol in them.

" The King's Bathe seems to have a little Vitriol " in it; for if some beaten Galls are cast into that " Water, it will have a light tincture of a black " purple colour.

" 'Tis also to be noted, That a certain * Mineral " of a Metallick nature, ariseth out of the Earth, " with the Springs of the Bathe, which is easily " turn'd into Vitriol. For if any acid liquor be " affused

* *Minera*, for *Minerale*, is corruptly, though Chymically, used here

" affuſed on the Sand (which breaking out with " the Springs, is found in the bottom of the Bathe) " it being corroded with an acid Menſtruum, not " without a remarkable effervescence, will in part " be converted into Vitriol, juſt as it happens to the " filings of Iron corroded with an acid liquor.

" For if that Sand of the Bathe corroded with " an acid liquor, be put into the Infuſion of Galls, " the liquor acquires an atropurpureous colour. " Whereas if the Infuſion of Galls be put on the " Sand newly taken out of the Bathe, and not cor- " roded with an acid liquor, it will, by no means, " be of a purple colour; an apparent ſign, that " the Metallick Sand of the Bathe, unleſs corro- " ded with an acid Menſtruum, doth not turn to " Vitriol.

" It is further obſervable; That the Sand of the " Bathe kept ſome time, and expoſed to the open " air, will of its own accord, be converted into " Vitriol; for if that Sand be mixed with the Infu- " ſion of Galls, the Water will contract an atro- " purpureous appearance.

" Moreover, If it be laid on the Tongue, it " hath a perfect Vitriolick taſte; and no wonder, " for the Nitro-æreous Spirit, after ſome time, " cloſeth with the Metallick Mineral, and Salino- " Sulphureous Marchaſite, of which Vitriol uſeth " to be made, mixed in the Sand, and cauſeth it to " ferment, and at laſt, as was ſhewed before, con- " verts it into Vitriol, &c.

CHAP.

CHAP. III.

An Examination of some Particulars in the former Chapter.

HOW far this Author hath ploughed with my Heifer, I leave to the consideration of those that have been any way acquainted with my design; and shall only here take notice, what Observations are agreeable with, or different from those I have often made with the greatest exactness, and repeated Trials, submitting all to the unbiast judgment of Indifferent persons.

And first of all, I concur with him, that the Baths of *Bathe* are in part impregnated with a certain Salt of an Acid nature; but why this acid Salt should be called *Aluminous*, I am not yet so fully resolv'd, as much on other accounts, so somewhat on this, That although an acid Spirit be in Alom, yet the most perceptible taste is either *acerbe* or *austere*; which being not observed in these Waters, I have so much reason to judge *Alom* not predominant, as asserted here.

The Experiment he mentions of precipitation or alteration of the Waters to a milky colour, or almond Milk, we owe to the Ingenuity of the Industrious Mr. *Stubbe*, who, though he had not the good hap to discover what was precipitated, yet gives it the general name of an *insipid Magistery*, and is nothing else but *Freestone* finely wrought, and intimately mixt with the body of the Waters.

Plalt. red. To a Non-pl. p. 135.

If any blame me for calling it by so homely a name, I desire they would consider, that I had rather

rather call it so than a Metallick Mineral, or a *Salino-sulphureous Marchasite*, supposing it more agreeable to all their apprehensions that will be concern'd in things of this nature, and whom I would not have abused with hard names and uncouth expressions; the effect of Ostentation, or sanctuary of Ignorance.

That this is *Freestone* appears by this, that 'tis insipid, gritty, scowrs, leaves a white colour like Chalk on the fingers after it, and is inclinable to an union into a stony consistence.

That this is not *Calx vive*, or any *lapis Calearius* that holds affinity with it, I am much induced to believe from this, That neither the Insipid magistery, nor the more gritty powder, being nothing different but in fineness and colour, will, either alone or together, open the body of Sulphur, which is usual with *Calx vive*, as I have fully experimented by decocting two parts of the powders with one of Sulphur in a proportionable quantity of Water, which gave the water very little alteration, and as little was precipitated. To make it further evident, I calcin'd a large Crucible of it with as strong a fire as could well be given, yet nothing quick or limy did appear, but dead and gritty ashes, which, mixed with water, neither made it white, nor created any disturbance. But more of this in what will follow. See Obs. 83

That the Bath-water will coagulate milk, I confess, but not as any other acid liquor doth; for this doth it sooner upon affusion, and makes a hard curd; that with the Bath-water, must boyl again and that pretty smartly, else a soft white Curd, as commonly it is, will not appear.

I also agree with the forementioned Author in this, That there is a considerable quantity of an

an * *Alkalizate* Salt, mixed with some other Salt in the body of the waters, and apparently distinguishable by the taste, as well in a *Lixivium* made of the Contents of the waters, as in both the Courser part, the result of the Evaporation, and also the purer part, when made white and refin'd; and that this *Alkali* doth constitute good part of the Saline matter, with which the Baths are impregnated.

* *Under this Notion, I take the liberty to understand Common Salt, or* Sal Marine, *consonant to the proper notation of the word: for the Salt of* Kali *or* Glassewort *is Marine, though used indifferently by the Chymists for the fixt Salt of any Vegetables, by Calcination.*

For I am apt to believe, that great part of the acidity is breath'd off in evaporation, either in the Bath or over the fire, or both ways together, in regard very little of that taste is perceptible in the Salt extracted, but the Saline is easily discover'd. To the confirmation of which the acting also of acids on it may somewhat conduce, and the experience of many this Summer, who according to my directions have dissolved the Salt in the Bath-water to improve it, and have sensibly found an increase in the other taste, but little or nothing at all in acidity.

Neither doth the *Lixivium*, though made very strong, nor the *Oleum per deliquium* dropt 20, 30, or 40 drops into a small proportion of water, tinge with Galls either purple or black.

I may also urge as an Argument for the evaporation of *Vitriol*, the abundance of a yellow *Ochre* which ascends with the steam of the Bath, and is there chiefly to be found where the steam of the Water meets with any resistance, as I have noted elsewhere, which probably may be the *Terra Vitrioli*:

trioli: And although 'tis not very easie to give the reason, why the *Vitriol* should not be as visible as the *Ochre*, or else make it more acid than we find it to be; yet if we conceive it to be in *succo primitivo, aut Solutis principiis*, and there *per halitum*, and so *per transitum* too, it may better be conceived to go off, and not imbody as the other Salts do. Yet that all the Acidity is not breathed of, will appear from this, That the Bath-water cold will coagulate Milk. And what is more, the same water distill'd from a gallon to a pint, a fourth part of that pint will make a curd, when the distill'd water in the Receiver will do nothing at all: Which may probably proceed either from something Vitrioline, or rather from the acidity of Sulphur, in regard the Salt made white, in which is nothing wanting but the Sulphur, will not coagulate, as the water doth; whereas the browner Salt before calcination, dissolved in Spring-water, will. So then, this *Alkali* is but one part of the fixt Salt, found in the bottom of the Vessel after evaporation *ad ficcitatem*.

For a further confirmation that an *Alkali* is contained in the waters, which, considering the Quantity that may continually be made evident both to sight and taste, will scarcely be judged to need other demonstration. Yet 'tis observable, that the Cross-Bath having lately been kept drawn four or five daies, the Saline matter not meeting with water sufficient for its dissolution, was driven up in substance from the Springs, and again reverberated by the ambient air, and incrustated on the tops of the stones that were above the water in the bottom of the Bath, which gave me some divertisement to behold, and, on examination, appeared much *alkalizate* both by taste and ignition; some pungency

gency also I observ'd in it, which I rather judg'd to proceed from the acrimony of *Nitre* than *Tartar*, but the predominant taste was clearly *alkalisate*, which after the Nitrous parts were wasted, was less exceptionable in the remaining calx on the Iron after burning, in which the Alkalisate taste was most remarkable; not to mention its crepitation, and that some pungency also is observed in an *Alkali* it self.

To make it further evident that this accretion did probably arise from the *Minera*, I believe, not far distant, and was not engendred or contracted from some floating particles in the air derived elsewhere, and there settling by way of Magnetism, as some may imagine; 'tis further remarkable, That neither the stones under water, nor, what is more material, any stone either of the Seats, or in the sides of the bottom of the Bath, remote from the water, had any Salt affixed to them, but only those, as I may so term it, that peeped out of the water, the tops of which only, as I said before, were incrustated. So that had a Magnetism any place here, the Salino-Nitrous particles must, I conceive, have lighted as well on the stones of the same nature hard by, as where they were, the reason of the thing being much the same. For a fuller Testimony of this, *See Obs.* 88.

I acknowledge also this, That a great Fermentation is produc'd by the affusion of Acids on the Sand and Mud of the Bath, (but do not tell you who first observ'd it) and a much less on the Scum; yet I must be excus'd in this, if I say, That I cannot conceive how this should arise from the action of Acids on a Saline matter, in regard it transcends my understanding to apprehend, how any Salt can possibly lie at the bottom of the Bath, either

either in the Sand or Mud, undissolved, and the waters no higher impregnated than we find they are.

'Tis a trivial Observation, that what is dissolvable in any liquor, the pores of it will receive till it can hold no more; neither can I be yet perswaded, that there are just so many porosities in the Bath-water assigned for *Vitriol*, and the rest taken up with other Bodies, seeing the dissolution of *Vitriol* in the Bath-water afterwards, and the alteration in taste that happens thereupon, is sufficient to give me satisfaction to the contrary.

But to speak a little more to this, because the Author insists so much upon it; If any *Vitriol* be contained in the Sand, 'tis no absurdity to conceive that warm water may dissolve it and fetch it out; now, if half a pint of warm water be poured on an ounce of Sand, with what agitation you shall think convenient, and thus let stand infused ten or twelve hours, the water then decanted, and the Sand dried and weighed again, there will be little wanting in the weight, abating for the *Oebre*, which riseth first to the top, through the body of the water, much like white *Vitriol*, afterwards precipitates and settles at the bottom on the Sand, and is hardly preserved in the decantation.

The Ebullition therefore, on the affusion of acid liquors on the Sand, I conceive doth arise from somewhat not Saline (if Taste be the judge) of which I shall treat more at large by and by: So that the Sand and Salt are no further of the same nature, than as fermentation may arise upon different commixtures. How this may be reconcil'd to the experiment I sometime made, of making Ink with Bath-water and Galls, and the Sand of the Bath, with other things which might have been

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'Tis a trivial Obſervation, that what is diſſolvable in any liquor, the pores of it will receive till it can hold no more; neither can I be yet perſwaded, that there are juſt ſo many poroſities in the Bath-water aſſigned for *Vitriol*, and the reſt taken up with other Bodies, ſeeing the diſſolution of *Vitriol* in the Bath-water afterwards, and the alteration in taſte that happens thereupon, is ſufficient to give me ſatisfaction to the contrary.

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no small encouragement to this opinion, I shall have occasion in part to declare hereafter, but more when I find my Answer is required.

As to the Salt, or rather, to use the new-made word, *Calcineous* kind of Earth, sticking to the bottom of the Gouts and passages, almost in all places where the water passeth, I was never yet so happy, though I have searched particularly to find any such thing. I confess I have heard it spoken, that five years ago, or thereabouts, there was a Gout out of order at the Cross-Bath, in the rectifying of which there was observed some such matter adhering to the Passage; but this, I suppose, was as much above the Civilian's knowledge, as the Physicians, and whether a bare Tradition with some other uncertainties, to say no worse, be a sufficient foundation for this Hypothesis; *That the Salt of the Bath doth much resemble a Vitriolated Tartar, or Aluminous Salt*, I shall leave those to determine that know the meaning of this approved Sentence, *Nullum simile est idem.* And seeing that the Author chooses to call this adherent matter by the name of a *Chalky kind of Substance* rather than a *Salt*, I think I may not be much mistaken if I imagine it to be *Freestone*; concerning which I can say no more, till I shall happily meet with the like accretion.

That the Fermentation on the affusion of Acids on the Sand, ariseth chiefly from the acting of that liquor on *Freestone* in conjunction with some Testaceous particles, and not from any other Saline matter, seems evident from this; That whereas these parts with a blew Clay or Marle, Rubrica, Ochre, and Chrystal-pebbles, are clearly distinguishable by a Magnifying-glass in the Sand, when the acid liquor hath done its worst, and the difference

ference between the Sand and it, is amicably compos'd, the remaining particles of Sand that will not ferment, are only some part of the Marle and Chrystals; And this I call *Arena castrata*, because, by this means, the Sand loses its fermenting vigour, though the stones do remain.

And whereas the Mud of the Bath, which seems chiefly to consist of this blew Clay or Marle, with something Sulphurous, will do the like; the Fermentation I conceive doth arise not so much, though something I confess, from the Earth it self, as the Testaceous particles with which it abounds, in which Earth nothing Saline can be discovered to which the ebullition may make any pretence.

To this may be added; That the colour of the Acid liquor, after Saturation by the Sand, is altogether the same with what ariseth from the *Freestone*, both equally resembling the infusion of the filings of Steel; so that in this also there is an agreement.

CHAP. IV.

Of Nitre *in the Bath-Water.*

THat *Nitre* is contained in the Body of the Waters is evident from this, that it may, by art, be extracted thence; and I may as well ſuſpect, and, if I pleaſe, believe, that I had not mony in my pocket, when I took out ſome ſilver for a neceſſary uſe; as when I ſee *Nitre* taken out of the Bath, ſay it was never there.

But the difficulty will be to prove the thing; now, I ſay, a *Sceptick* may doubt whether a Man be a Man, a Brute a Brute, or whether he makes uſe of his voice that asks the Queſtion; but whether he be not the wiſer man that takes theſe for granted, and not pragmatically contradicts the unanimous conſent of Judicious Writers, is eaſie to determine.

I confeſs it burns not as Common *Salt-Peter* doth, becauſe it leaves a Calx behind it; but in that more reſembles the *Nitre* of the Ancients, a pound of which being burnt will leave four ounces of Aſhes: *Salt-Peter* will leave none.

Jord. *Nat. Bath. & Min. Wat.* chap. 7. p. 53.

Neither doth it huff, nor melt altogether in a ſmall quantity as *Salt-Peter* doth, on the account of an allay it receives from the mixture of another Salt of an *Alkaliſate* taſte with ſome bitterneſs withal, which remains on the Iron-plate after accenſion, and is little more than a fourth part of the Body; wherefore to deny the being of *Nitre* in the Salt, becauſe 'tis not all ſo, is as abſurd, to make a Linſey-woolſey Compariſon, as to affirm, there is no Woollen in that ſort of Veſture where Linnen

Linnen is; or to say, That a man that is both Lawyer and Physician, hath nothing of Physick, because he hath something of Law.

But that *Nitre* is there, though not predominant, seems clear by the shooting in *stiria's*, which is concluded to be the proper form of that Salt; and although *Tartar*, and perhaps some other Salts, may somewhat resemble it; yet the difference is easily perceptible by the sight, but more by the taste.

And now I am discoursing of this matter, I conceive the Author did not hit the mark, because he did not make the Bath-water shoot, in that he only mentions, *the Salts that remain after evaporation, which*, he says, *put on a Coal, burn not as Nitre doth.* But the shootings so called, in a figure somewhat pyramidal, with many *Columellæ*, or small pillars closely united, put on a red-hot Iron-plate, and so burnt, may alter the case, which I affirm to do, as I mention'd before.

And, what is not a little considerable, on the burning of six ounces of the Chrystals, in order to the Examination of the remaining Calx, the Nitrous parts of the shoots, being many in number, in a short time melted, and ran down both sides of the Iron-plate in a stream, consonant to *Pliny's* observation of *Nitre*, which he affirms *ingentibus rivulis profluxisse.* (Q)

To which I may add the bitter Taste apparently discoverable in the Salt, insomuch as to bring it within the verge of a suspicious appearance of a *Sal amarum* (if any such Salt there be distinct from *Nitre*) which bitterness hath been accounted proper to *Nitre*, and the waters impregnated therewith, of which the Laborious *Ballius* gives this Testimony; *Differunt etiam Nitrosæ Aquæ à Salsis,* *De Therm.* l. 3. c. 3.

quòd amaroſem Nitroſæ ſapiunt potius quam Salſuginem, & quo magis ſyncerum habent Nitrum eo ſunt amariores. So that the bitter Calx mentioned before, ſeems, if any, to be the true Calx of *Nitre*, and no ſmall argument of its ſincerity, although this taſte be not perceptible in the water, in regard the *Nitre* is much diluted, and though ſufficient for the purpoſe, not in ſo great a proportion there.

Alſo for a further ſatisfaction, if any Aluminous parts were contained in the Chryſtal ſhoots, I obſerv'd, That the ſix ounces mentioned before, after they had hufft, melted and ran upon the Iron-plate, were in little more than one minute reduced to ſomewhat leſs than two ounces of a dead white *Calx*; which being again diſſolved, filtred and evaporated, gave me a plain *Alkali* with ſome remaining bitterneſs, which on the affuſion of any acid would ferment, and being put to undergo the *fire-ordeal* Trial, would neither melt nor boyl, but crackle and leap.

To make a further Trial, whether what was bitter and ſuſpiciouſly Nitrous might be ſeparated from the *Alkali*; I diſſolved and filtred the ſame Salt again, and evaporating it *ad Cuticulam*, it ſhot partly into a white hoary down, penetrating cooling, and bitter, diſtinct from the *Alkali* with which before it was mixt, and partly into an inſpiſſated juyce, which I judge to be the *ſuccus primitivus* of *Nitre*, with the ſame qualities; both which put on the Plate did huff and melt as the former, leaving a ſmall bitter Calx behind it, which, I believe, by frequent diſſolutions, evaporations, and coagulations, would huff and melt all off, to the utter conſumption of its whole body that way, I mean as far as Nitrous, the *Alkali* ſhewing

it

it self proportionable in the Calx, after every trial.

And here I would not be mistaken, as if I pretended to that grand *Arcanum*, the discovery of the Nitre of the Ancients, for I am well assured, that the description of that is very much different from what I am now discoursing of, being acknowledged by *Pliny*, *Dioscorides*, and others, to be of a rosie colour, and almost purple, which they used sometimes to dye that colour with (though some white there was also) and came nearer to the nature of ordinary Salt, whereupon *Dioscorides* in his 85th. Chapter hath these words, *Nitre, and the froth of Nitre* (or *Aphronitrum*) *have the same virtues as Salt, and are burn't like that*; yet because some measures may be taken from that, for the better understanding of what is now under the test, I thought fit in that regard at present, only to make this bare mention of it.

Neither can the contrary, I think, be evinced from the effects; for cooling, penetrating, and purging, are attributed to Nitre, and confessedly in the waters, the two former evident in allaying thirst, abating inflammations, and quickness of passage: the latter, as plain in its operation, for Nitre as well as Salt, is said both *alvum laxare*, and *urinas ciere*, and *Baccius* treating of nitrous waters, affirms, that they do *vacuare, virtute Nitri, per alvum, & per urinas.* The like may be said of the external effects by Bathing, which can no way prejudice the being of Nitre there.

Besides, This way of arguing from the effects is but *à posteriori*, and less significant where there is matter of fact, which may be useful in the dark; but if it thwart with a plain experiment, must yield; for, *Quid verba audiam, cum videam facta?* And

whoever ſhall undertake a buſineſs of this nature may conſider, that the beſt judgment to be made of the effects, is from a conſtant obſervation of particulars on the place, which cannot be conceived to be ſo well done at a diſtance, but muſt require, beſides ſome time, a good attendance, as well as practice here. But to return.

Theſe *Stiriæ*, or Needles, I obſerved in the water of all the Baths, yet in a different ſhape and conſiſtence; for the King's Bath-water after a full imbibition of the Salt diſſolved, and a ſtrong Lixivium thence procured, evaporated *ad Cuticulam*, and ſet in a cool place, ſhot from the inſide of the evaporating Glaſs into its Cavity, into ſtrong, and compacted Needles, with that ſtrength, that it took ſome of the Common Salt with it, which appeared in the Nitrous ſhoots, ſomething like the ſtars in a clear ſky, but white, and in a Cubical form, in perfect ſquares, or Teſſera's diſtinct from the body of the Nitrous ſhoots, with which the Nitre was ſtudded, being impacted into it.

The Croſs Bath ſhot in ſmaller Needles, but longer and very thin, in great number, directly from the bottom of the glaſs, very cloſe together, but diſtinct each from other, much like the Finnow, or hairy excreſcence, that oftentimes ariſeth from corrupted matter, which on the leaſt violence offer'd would break, and not endure any kind of reſiſtance.

The Hot Bath gave me more trouble to bring it to ſhoot, inſomuch as being fruſtrated in two or three Experiments, I had almoſt concluded there was nothing Nitrous there, but the thing afterwards ſucceeding, I had on a ſmall quantity of the Salt diſſolved, and the Lixivium evaporated according to Art, five, or ſix ſingle Stiria's, bigger,

and

Fig I

Fig II

Fig III

Fig V

Fig IV

Fig IV

Fig VI

Fig VII

Fig VI

and ſtronger, though not ſo long, as thoſe I obſerved in the water of the Croſs Bath, which gave me ſatisfaction as to that Bath alſo, in the particular thing of Nitre now under debate. Since which time on another Experiment, I had as firm and compacted Needles from the Hot Bath, as I had formerly from the King's, both which Baths ſhoot much alike, and different from the Croſs.

I ſhall not lay any great ſtreſs on theſe obſervations, in relation to the difference between the three Baths mentioned before, in regard it muſt be a buſineſs of greater experience, and more exact obſervation of many Circumſtances, to ſtate that affair as it ought to be, and is, in good part done in the Miſcellaneous Obſervations hereunto annex'd; only this uſe I may ſafely make of them, to confirm what I had before aſſerted, That there is Nitre diſſolved in the Water of all the Baths of *Bathe*. And if this be not the thing that hath hitherto been deſcribed under that name, by the moſt approved Writers, I preſume we may afterwards take it for a Chimerical notion, that hath no foundation in any work of Nature, but owes its ſubſiſtence to a phantaſtical brain.

To this may be further added; That the *Liquamen*, or *oleum per deliquium*, being cloſely ſtopt, and but heated by the fire, preſently, as ſoon as cold, concretes into a Nitrous form; ſo that we need not call in the ſecret, and inviſible aſſiſtance of the external air, to make a Metamorphoſis almoſt as ſtrange as thoſe mentioned by the Poet, when we have clear, and unalterable principles of Nature, and innate propenſities, and diſpoſition in matter it ſelf, with a divine impreſſion, that will ſerve the turn.

In

In the rear of theſe Philoſophical Arguments, I ſhall offer one (ſupernumerary) Grammatical, which is this; That the Salt I call Nitrous, either in the Sun, or by Candle-light, ſhines and ſparkles very much, conſonant to the Notation of the word *Nitrum*, which probably, may not be ſo much a Grecian, as the great Etymologiſt would have it, and derived *ἀπὸ τὸ νίζειν* from its ſcouring, and abſterging nature; as a Latiniſt, and ſo called *à Nitendo*; becauſe it gives a greater luſtre than any other Salt doth.

CHAP. V.

Of Sulphur in the Bath water.

AS to Sulphur, the next thing to be inſiſted on, as contained in the Waters, I conceive that many that have endeavoured to avoid *Charybdis*, have fallen into *Scylla*, and becauſe the ancient Authors have aſſerted that Sulphur was undoubtedly concern'd in all Baths, they will affirm there is none in any; but whoever builds a fabrick on this foundation, and certainly concludes that Sulphur is not in the Bath-waters, becauſe it cannot be diſcover'd by precipitation, I would have forbear a poſitive determination on a negative experiment, till I ſee Vitriol precipitated in ſubſtance from the King's Bath-water, which is acknowledg'd to be there. And if I cannot light on an apt precipitater, which every way oppoſeth the particles to be ſo diſcover'd, and have ſome other reaſons to incline me to the contrary, I ſhould not be ſo fond of my own conceit,

ceit, as to be prevail'd upon by a comparative inſtance of unſlak't Lime, to wipe my own Noſe, and put out my Eyes, which as far as they can, aſſure me to the contrary.

I ſhall refer the Reader to what is mention'd before concerning the Colour and Smell, in calcining the Contents of the Bath-water in general, and till I ſhall meet with ſomething that will both burn blew, and give a fetid ſmell, that is not Sulphur, I ſhall ſo eſteem that, till aſcertain'd of the contrary.

I may further add, That the Sulphur is probably incorporated with the Salt, as appears by its paſſing with it into the Lixivium, and through papers in filtration, and not diſcoverable but by a ſtrong fire, by which the body of the Salt is open'd, and a ſolution of the Continuum made, in order to fuſion; ſo that if you do not precipitate both, you can precipitate neither, unleſs a ſeparation of the Sulphur from the Salt be made, which, I preſume, is not eaſie to be done, without the help of fire, by which the Sulphur is conſum'd: ſo that the comparative inſtance of unſlak't Lime is little to the purpoſe; where the Sulphur is ſeparated, decocted, and precipitated; here not ſo, being not apart, but reſiding in a Salino-Sulphureous Salt, a piece of whoſe Body, as we now have it, it ſeems to be.

Moreover, Whereas he collects from the Bath-waters not tinging Silver yellow, but rather black, that there is no Sulphur contained in the ſame; I may retort, and that very juſtly, this as an argument to aſſert it. For the proper colour that Sulphur diſſolved gives to Silver is not ſo much yellow as black, as may be eaſily diſcerned by putting any piece of Silver, but a very little while, into the decoction

coction of Sulphur made in the water of unslak't Lime, which gives as near the colour of the Silver I have caused to lye some time near the Springs of the Bath, as may be, so that the difference is not discernable; not to mention that some yellowness is observed on the Silver tinged by the Bath.

Neither am I fully satisfied that the only, or indeed the best, precipitator of Sulphur is an acid; for on the decoction of that Mineral in the water of quick Lime (the Lixivium, though with much Sulphur, not succeeding) and very sudden change, on the affusion of Spirit of Vitriol, into a milky, and much whiter Consistence, the Liquor afterwards settled, and precipitated not as Sulphur, but Lime-stone; so that the Sulphur, although it gave a greater fetid smell, yet was not so apparently precipitated, as by Oyl of Tartar in another glass, which gave the Sulphur in proper colour precipitated, without a permanent lacteous opacity. Whereupon I made this observation, as to the present experiment, That although acids do not precipitate of this lapideous matter alone, yet if in the embraces a strong sulphurous commixture, they will, and the Lime-stone is most properly precipitated by an acid, if Sulphur be decocted with it; whereas the Body of Sulphur, decocted as before, is best precipitated by a fixt Salt, the Sulphur appearing without whiteness, in its own garb, though not so fetid as on the affusion of an acid.

It may be also noted that *S. Cloſſius*, in his preparation of *Lac Sulphuris*, in which the body of Sulphur is open'd with *Calx Vive*, directs the Sulphur to be precipitated with Urine.

The occasion of this mistake (seeing he pretends to give the reason of another, concerning an experiment of a like nature) I conceive to be, That the

the white matter precipitated on the affusion of any acid, was, without much examination, reputed wholly sulphurous, as appears from these words; *For if Sulphur be boyled in the water of unslak't Lime, the water becomes white, not by the affusion of a fixt Salt, as before, but of an acid: so that fixt Salts may dissolve Sulphur but not precipitate it.* Whereas the whiteness ariseth much from the mixture of the Lime-stone, as appears by the open confession of what is precipitated, if standing some time, filter'd, and brought to the test by fire, where the Lime-stone is discover'd, the Sulphur being rather disturb'd than precipitated by the acid liquor, which makes it give a greater fetor, but never kindly precipitates; the other precipitation with oyl of Tartar, which here, contrary to its wonted course, joyns with the Lime-stone, which it usually precipitates, and opposeth the Sulphur, is very apparent, and sulphurous beyond contradiction.

I am not ignorant, that in the preparation of *Lac Sulphuris* mentioned before, Sulphur also is precipitated by an acid, but *that fixt Salts should dissolve Sulphur, but not precipitate it*, is what I said I was not so fully satisfied in. Not to mention that the matter precipitated by a fixt Salt is white on the first affusion, though the whiteness be not so permanent, the Sulphur in a short time precipitating in proper colour.

Besides, If Sulphur be boyled in the Bath-water, and doth not tinge it with a yellow colour, I presume, it cannot thence be argu'd that there is no Brimstone there, for the colour of the water in which Sulphur is dissolved, is not so much yellow as Lixiviate, or reddish; and therefore *Schroder* gives this direction for the making that preparation of Sulphur mentioned before, that after the Sul-

phur

phur and Tartar are mixed, they ought to boyl, *donec fere omne Sulphur ſolutum ſit, liquorq; rubeus appareat*; though ſome addition I confeſs it may have from the Tartar. Yet *Cloſſeus*, in his way of making that preparation where there is no Salt of Tartar, but, inſtead of that quick-Lime, which gives no ſuch tincture of it ſelf, hath this Note; *Coque, donec partes tres aquæ ſint conſumptæ, ruboremque contraxerit inſtar ſanguinis, ex Sulphure diſſoluto.*

I therefore think it no ill advice here, that they that are ſo much concern'd to give the reaſon of the miſtakes of others, would a little mind to rectifie their own, and not be an *Argus* abroad, but a Mole at home.

I do alſo acknowledg, that I believe that the white Magiſtery or impalpable Powder, precipitated from the Bath-water on the affuſion of Salt of Tartar, or any other analogous, or agreeable Salt, is not Sulphurous, much leſs Aluminous; but rather Stony, of a lapideous ſubſtance, the reſult of an intimate Commixture, with the body of the Waters, which may have no ſmall influence on their fermentation, as may hereafter be more fully conſider'd.

And as to what reflects on that famous Practitioner, the Ingenious and Learned Dr. *Willis*, I ſhall, at preſent, ſay no more than this, That obſerving one ſo pedantickly dreſt up in his own clothes, he ought not to be affrighted with his own ſhape; only this may be further noted, That whereas Dr. *Willis* had deſired of me the exacter trial of that Experiment of decocting Sulphur and Antimony in the Bath-water, I well remember I return'd him ſomething of both that was precipitated after a double filtration, and the decoction performed

formed in a Veſſel altogether free from the ſeaſon of any fixt Salt.

Yet I muſt acknowledg, that what was precipitated was very inconſiderable to what was decocted, and not ſo much as to make much alteration in the colour of the water; which may deſerve their conſideration who affirm, a Lime-Chalk Stone, or *Lapis calcarius*, to be contained in the Waters, and yet deny them to diſſolve Sulphur, and again affirm, that Sulphur is diſſolved in the water of Lime.

The ſame alteration of the water into a turbid milky appearance, and the precipitation by oyl of Tartar, of an inſipid powder, mentioned before, was alſo obſerved in the Spaw at *Scarborough*, and Sulphur-Well at *Knaresbrough*, by *William Simpſon* Doctor in Phyſick, as appears from ſeveral places in his *Hydrologia Chymica*, and Hydrological Eſſays, which he there aſſerts to be Aluminous, and page 118. of the latter Treatiſe ſaith; *By the addition of Oyl of Tartar this Sulphur-water turns white, and that becauſe it is impregnated with a ſmall quantity of a Simple natural Alom Salt.* How far Alom is concerned in that water, I ſhall not here diſpute, but leave it to the Learned Dr. *Wittie*, whoſe concern it is: only thus much I can ſay, that the like *Phænomenon* appearing in theſe waters, what is thus precipitated here is not Aluminous, as hath been acknowledged by many eminent Phyſitians, who have ſeen ſome quantity of the precipitated powder, and was particularly noted by the ever Honoured Sir *Charles Scarbrough*, this Summer, here.

But to prevent any miſ-underſtanding, I muſt acknowledg that this aſſertion ſtands on this foundation, That the white powder precipitated by oyl of Tartar from the Waters, is the ſame with the finer

ſort

ſort of what I had, in greater quantities precipitated ſpontaneouſly *per decubitum*, on the evaporation of many Hogſheads of the Water, and is now to be ſeen, though not altogether ſo white nor fine, having undergone many alterations, which being decocted in Spring-water, the water filter'd will precipitate with oyl of Tartar, as the Bath-water doth; yet if any one ſhall think fit to deem this Saline, and perhaps, Aluminous; he ought to conſider, how any Salt can ſo ſoon be deveſted of the eſſential property of what is ſaline, as to be rendred *perfectly inſipid, when ſaline at firſt*: though I do not abſolutely deny, but that we may attribute, though ſomewhat Catachreſtically, the name of Salt, to ſomething not ſaline, communicating with it in ſome other of its properties.

I know very well that Alom diſſolved in Spring-water, the Water filter'd and the Salt precipitated with oyl of Tartar, will be impaired much in its ſaline taſte; yet ſo much of the ſowrneſs, and ſtipticity will remain, as will be ſufficient to diſcover its nature.

CHAP.

CHAP. VI.

Of Vitriol in the Bath-water.

TO pass by the Reason of the Common Artifice of tinging Silver at the Bath, what concerns the Scum, and Sal Armoniack, as of no great moment; Vitriol is, by Him, denied to be in the Cross and Hot Bath, because Galls beaten and infused in these Waters, will never turn them purple nor black, which is confessed would certainly be, if these Waters had Vitriol in them.

How true this is, a slight Experiment will soon evince, and if the Author had ever made trial, his Galls or Sight, must be worse than mine, if a purple colour did not appear.

To which may be added the Experience and Testimony of my Honoured and Learned Friends Sir *Edward Greaves*, and Dr. *Nat. Highmore*, who have both made trial, and found the Waters turn. With the former of whom I lately further observ'd, that when we had been sufficiently satisfied in the turning colour of the Hot Bath Pump-water, with less than half a pint of Water and but two grains of Galls, and had thrown away the Water and Galls, in order to the trial of something else, more of the same Water, though much cooler than when brought at first, being powred into the same glass, turn'd colour also, receiving a brisk light purple, from the remaining particles of the former infusion about the glass, though nothing of the Galls did appear at all.

'Tis also confirm'd by this, That whereas the Leaves of Oak make little or no alteration in the Water of the King's Bath, the Chips, or inner Bark of the same make rather a better purple in the Water of all the Baths, than the Galls; only the King's Bath tingeth deeper than the other two, as in all Experiments of this nature, it appears to do. The like also will happen on the Seeds of Sumach contus'd and infus'd, but with Pomegranate Flowers most apparently, so that the Water of any of the Baths affused hot on that, will presently turn purple; though the colour doth not keep so long in strength, as that which ariseth from the Oaken Chips.

These things consider'd, I conceive it no injury to the King's Bath to allow it a little Vitriol, though manifestly derogatory to the other two to deny it, since they make their claim by the same evidence, and that Judg will hardly free himself from the censure of injustice and partiality, that will not hear a poor mans Tale, but suffers an honest Cause that hath weak lungs and a weaker purse to be lost, on the louder clamours of more importunate addresses.

The truth of this Experiment being thus far call'd in question, I am the more afraid of the certainty of some others; for I remember an old Story of Mr. *Thief* in the University, that was wont to be very bulie in some Booksellers Shops, and entred in the Shop-Book under that name, whoever therefore was taken in the fact but one time, was oblig'd to quit the whole score, on this account, That he that was really convicted once, might commit the same thing five, ten, or twenty times before, and therefore he the man from whom all was requir'd.

The

The Metallick Mineral, so called, hath nothing Metallick contained in it; and if this be so easily, by the air, converted into Vitriol, 'tis very strange we have not yet had any Houses of Vitriol, which surely have endur'd the air long enough to experience a Transmutation.

As for the Sand breaking out with the Springs in which Vitriol is supposed to lye undissolv'd, as was mentioned before, if there were no better arguments for Vitriol than this, I shall not stick to say, that he that depends on this, builds at best but on a sandy foundation.

That the purple colour appearing from the mixture of the Sand of the Bath, with the infusion of Galls, may not arise from the tincture of Vitriol, seems more than probable by this Experiment. I have formerly declared, that the Sand of the Bath may be so far corroded with an acid Menstruum, as not to ferment any longer, but lye quiet in the bottom of the glass without any motion at all; now, this Sand on the affusion of Common Water gave an excellent purple, when 'tis not likely that any thing saline should remain, after so many washings and reaffusions, as are requisite to reduce the Sand to that condition. Moreover 'tis considerable, the infusion was not acid, nor any way alter'd from its common tast. But this Experiment I made but once, and had not an opportunity of repeating it again.

'Tis likewise more observable, That after some hours standing, a purple floccous matter did spontaneously precipitate, upon which there being a clear separation, the Water return'd to its pristine colour, and the floccous matter subsided in the bottom of the glass, which being filter'd *per Chartam*, and examin'd, was perfectly insipid, and not at all Vitrioline.

Besides, On the Calcination of half a pound of the Sand, when the Crucible was as red and the Sand as hot as usually it is when the Salts do run, the Sand powred out glowing hot, nothing saline was observ'd to concrete among it, which it would certainly do, if any fusible Salt were there, as in other Calcinations it appears to do.

I therefore rather judg it to proceed from an insipid but astringent Ochre, such as is mentioned by *Fallopius*, which lying some time in the open air, becomes more sowr than when taken out of the Bath, which may occasion the difference between the Sand newly taken, and that which is kept some time; the Ochre it self infus'd making the liquor much blacker after some standing, as is more fully declared in the following Chapter.

De Met. & Foss. c. 35. de Ochra.

CHAP.

CHAP. VII.

Containing a farther Proof and Illuſtration of the former particulars.

TO make this a little clearer; 'Tis an eaſie Experiment to powr warm water on the Sand, in what proportion you pleaſe, which if kept ſome time will alter the water in which it is infus'd, into a yellowiſh or amber colour: when the water is impregnated very well, mix ſome of this with the infuſion of Galls, and preſently an atropurpureous colour will appear, in which if you infuſe white paper but a very little while, you will quickly be ſatisfied what colour it will tinge. Now, if this infuſion be permitted to cool, the Ochre will precipitate, leaving the water ſomewhat yellower than in it ſelf it is, to which it alſo communicates a harſh taſt, and at laſt ſettles on the top of the Sand, from which it may be ſeparated by decantation. The contrary happens to the Sand newly taken, in which the Ochre clogg'd with too much moiſture cannot ſhew it ſelf, as when older, and more dry. So that I ſee no reaſon or neceſſity, from this *Phænomenon*, to aſſert the exiſtence of Vitriol in the Sand of the Bath, otherwiſe than as it hath relation to this aſtringent Ochre, which I do believe receives this tinging property by the impreſſion of Vitriol, this being in all probability, as is noted elſewhere, the *Terra Vitrioli*, or Earth, in which the Vitriol is contain'd before exhalation; as I conceive, the Marl or Mud is the bed of Sulphur, or the *Terra*, to which that Mineral doth more nearly adhere.

And that 'tis this yellow matter that occasions the alteration, may be further evident from this; That after the first decanting, if the Ochre be powred all off, and warm water affused on the Sand again, and that infusion mixed with the infusion of Galls, no change of colour will ensue. To which may be added, that the Ochre it self kept some time, and infused in the decoction of Galls, will, after lying a pretty while, turn that Liquor into a much blacker appearance.

D. *Simpson* I shall end this dispute with the observation of one, who affirms, That Artificial Alom will not with Galls strike a purple colour, but the Natural Alom with its inbred Ochre, will; ascribing more to the Ochre than the Alom. So that this may be the end of that Controversie about Alom and Galls tinging Water purple, That Alom, as Alom, doth not tinge, but as in conjunction with this inbred Ochre, or as Vitrioline; for between Vitriol and Alom there are many resemblances, and a worthy Jord. *Nat. Bath.* chap. 7. p. 52. Author hath observed, that the Basis of Vitriol is Alom, both these being much alike, but that Vitriol hath a garb from Copper or Iron, which in the Ochre gives the tinging quality, the Alom, as distinct from Vitriol, contributing nothing at all.

If any shall affirm this Ochre to be Vitrioline, I have not deny'd it, having formerly supposed it might be *Terra Vitrioli*; but what I here question is, whether any Vitrioline saline body, different from the Ochre, be contained in the Sand, or can lye undissolved there.

'Tis very remarkable what is said, That if the Sand of the Bath, impregnated with an acid Liquor, be put into the infusion of Galls, the Liquor acquires an atropurpureous colour; and no wonder, since the acid Liquor may do much alone, as may be

be seen in the mixture of Vinegar, with the decoction or infusion of Galls, which supplying in some measure the place of Vitriol, by a kind of analogy inclines the infusion to an inky complexion.

And as for the Metallick Mineral contained in the Sand, which on the affusion and corrosion of an acid Menstruum, will in part be converted into Vitriol, I have said before that 'tis nothing else but a Common Freestone, a Mineral, I confess, but how far Metallick, I leave to the judgment of the men of that Art.

For a partial satisfaction in this thing; if the sharpest Vinegar be powred on the Sand in one glass, and on Freetione in another, the same fermentation will appear for the present, and the same blewish colour of the infusion afterwards upon Corrosion; so that it much resembles the colour and smell of the saturated Liquor, on the affusion of Vinegar on the filings of Iron. But whether this be a sufficient argument to dub it Metallick, I shall be better satisfied, when I am convinced of this, That Truth hath never suffer'd by meer Resemblances.

But that it may appear that I desire to proceed in this Affair with all ingenuity and freedom from animosity, unless what will seem necessary to discover truth; I shall here recite a Passage out of Dr. *Wittie*'s Answer to *Hydrologia Chymica*, leaving how far it may be applicable to the saline Stiria's mentioned before, to the judicious Reader and further observation.

The Candid Doctor, *pag.* 63. among other Preparations out of the Minerals of the Spaw at *Scarbrough*, made by Mr. *Sam. Johnston*, a Physician at *Beverly*, and by him communicated to the Doctor, makes mention of *an Essential Salt*, *which Mr.* Johnston *calls* Anomalous, *or* sui generis, *as differ-*

ing much from the factitious or natural kinds of Alom, Vitriol, or Nitre, though in some properties it agree with each of them.

The Reason of this Scruple, he adds, is this, which Paracelsus *hath clearly made out, That here they are not corporally, but* * *percolated, not perfect in their several kinds, but* in suo primitivo, *not single, but all mixed together, which as yet I could never attain to separate. And therefore this Salt is nothing so acid as Vitriol, nor stiptick as Alom, nor inflammable as Nitre, notwithstanding it doth shoot in Stiria's. I'le only add this, That they are all here, though* in fractis, imminutis, & debilitatis viribus, *and the virtues of the Waters to be judged from them all.*

* *I suppose, the Doctor doth not mean, that what is percolated hath no body or substance, but only that 'tis more refin'd.*

To which I shall only subjoyn this Remarque, That the Nitre, undoubtedly here, being allay'd with the mixture of some other Salts, could not be expected to do altogether as sincere Nitre doth, and the best way, I conceive, to discover the distinct natures in this *Compositum*, had been to have attempted a separation by frequent Calcinations, Dissolutions, and Coagulations, which, if done, I much admire the several Salts did not appear in proper form, as they did in the anomalous Salt of these Waters, subjected to the same way of trial: and then I somewhat question, whether Alom would have deserved so much favour, as the Doctor's good nature hath allow'd it here.

I shall forbear, at present, to trace this Author or follow his track any further, as also to examine his Opinion, concerning the Cause of the Heat of the Bath-waters, till my Treatise, in the same language he hath written in, be presented to the World; only thus much I shall say now, That I conceive an *Hypothesis* founded, though not on a subterranean fire, yet on things under ground, may probably give

give more ſatisfaction than ſome airy notions, conſidering eſpecially, that nothing external to the Body of the Earth, can in reaſon be ſuppoſed capable of reaching theſe Waters, but rather ſomewhat included in its own Bowels, which may be near at hand, of an active, even, and durable nature; when, to ſay no more, nothing is more variable than the air, nor unconſtant than rain.

I ſhall alſo diſtinguiſh the whole bulk of what relates to the Body of the Waters, into things Saline, and *non*-Saline: the former I ſhall endeavour to evince to be *Nitre*, *Common Salt*, and *Vitriol*; the latter, to be partly unctuous, as *Bitumen* and *Sulphur*; partly gritty, as *Freeſtone*; and partly earthy, as *Marl* and *Ochre*. I ſhall likewiſe examine what pretences Alom can make, and further diſcourſe of the difference between that and Vitriol: and laſtly, enquire into the competition of *Lapis Calcarius* with Freeſtone; ſo that the Bath-water will have relation to, or comprehend in its largeſt extent, eight diſtinct Subſtances, at leaſt according to my Obſervations, which will be the buſineſs, God willing, of the firſt Book of my Treatiſe *De Thermis Bathonienſibus*, viz. *de Aquarum Principiis, una cum earundem appendiculis, nimirum, Arena, ſive Sabulo, Luto, & ſupernatante uligine, ſive Spumâ.* The ſecond Book ſhall treat *De Aquarum Calore.* The third *De uſu Thermarum, ubi de modo Balneandi; de Aquarum potatione; de Antliatione jam in uſu loco dulciæ, aut Stillicidii Veterum; de uſu Luti*, &c. The fourth and laſt Book, I intend, ſhall be *De Aquarum Virtutibus, & Nocumentis, obſervationibus quibuſdam rarioribus, quantum res ipſa patitur confirmatis:* Which Emoluments and Inconveniences ſhall be both evidently deduced from the precedent Principles, the one recom-

commended, the other provided against. But this will require some time; for I am willing to prevent that fault in my self, which I find in another, and would not have it justly said of me, *Canis festinans cæcos parit Catulos.*

CHAP. VIII.

Being a Letter formerly written to Sir Edward Greaves.

I Know you (as well as other Ingenious and Inquisitive Persons) are somewhat concern'd, and desirous to understand, what Success my late Enquiries have had into one of the Grand Mysteries of Nature, I mean, the BATHS of this City: considering especially that you were pleased the last Summer to afford me the Honour of your Company and particular Acquaintance, and to express a more than ordinary desire of my proceeding in this Thing.

Concerning which I must tell you, That as I have not been wanting, either to Pains or Pay, in my Proceedings hitherto; so I have had the good Hap (which hath been my Encouragement) to meet with many considerable Discoveries. And though the main Body of the Matter collected touching this Affair, be not yet ripe for the Launcet, but will require a longer time to digest; yet some Observations I shall now communicate, which will give a little satisfaction to an earnest desire, and make, in some measure, appear that we have been

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lame and defective hitherto in a rational Account and true Understanding of the Nature of these Waters.

It hath been indeed the ill fortune of these Baths, (which I may truly say are as good if not better than any Baths in the world) to lie a long time in obscurity, and not so much as to be mentioned among the Baths of *Europe* by any forreign Writer, till about the Year 1570. when that Excellent Person Sir *Edward Carne*, sent Ambassadour by Queen *Elizabeth* to Pope *Julius* the Third, and *Paul* the Fourth, made some Relation of them to that famous Writer *Andreas Baccius*, then at *Rome*, and writing his elaborate Book *de Thermis*, into which he hath inserted them, upon his Relation, *Lib.* 4. *Cap.* 13. (though somewhat improperly) among Sulphurous Baths.

About the same time also one *John Jones*, an honest *Cambro-Britan*, frequenting the Baths for Practice, composed a little Treatise of them, which he calls *Baths Aid*, in which are some things not contemptible, though in a plain Countrey dress, and which might satisfie and gratifie the Appetite of those times, which fed more heartily and healthily too, on good Beef and Bag-Pudding, than we do now upon Kickshaws and Haut-gusts; yet nothing of the true Nature is there discovered, only, as almost in all former Writers of Baths, chiefly Catholick, a strong Stench of Sulphur, and a great ado about a Subterranean Fire, a fit resemblance of Hell, at least of Purgatory.

Our Countrey-man Dr. *William Turner*, I confess, was more particularly concern'd to give a better account, than I find is done in his Discourse of English, German, and Italian Baths; And whether want of opportunity, or any other impediment was

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in cause, I know not; but I find that at this stay they stood till the Famous Dr. *Jorden* took Pen in Hand, about the Year 1630. To whom I thought fit to make some Additions, at my first entrance on this Place, some five Years since. And although that Learned and Candid Physician had *chiefly and more especially an intent to enlarge the Knowledg of our Baths in* Somerset-shire, (as he declares to my Lord *Cottington*, in his Dedicatory Epistle) and hath performed more than any Man before him, yet what was first in Intention, was last in Execution; and how small a part of that Treatise is spent upon this Subject, how short he is in some Material Points, and what Objections may be framed against his Opinion, I may sometime or other, with due Respect, more largely treat of; and for the present shall here, with good *Sem* and *Japhet*, cast a Garment over the Nakedness of this my Father.

What hath been done since (except in some particular pieces of other Tracts, to the Authors of which the Baths are also indebted for their kindness and good will) is not worth the mentioning. The old saying's true, *Little Dogs must piss*, and what is writ upon an Ale-bench claims the greater affinity to the Pipe and the Candle; especially if the best Wine at the Feast (which is usually kept till last) be but a silly Story of *Tom Coriat*, and an old *Taunton* Ballad new vampt, abusing the dead Ghosts of *Lud*, *Hudibras* and *Bladud*, with a Nonsensico-Pragmatical, Anticruzado-Orientado-Rhodomontado-Untruth-Le Grand, which we Westerly Moderns, call a GROTELYE, into the Bargain. A pretty Artifice in Rhetorick, to cry a thing up, and besmear, and *shed plentifully* on the Founder *Ordure*, *both Humane and Belluine*.

Rode

Rode Caper, vitem, tamen hic cum ſtabis ad aras N. B.
In tua quod fundi cornua poſſit, erit.

Goat, Bark the Vine; yet juyce enough will riſe
To drench thy Head, when made a Sacrifice.

I have Induſtriouſly omitted Dr. *Johnſon*, Dr. *Venner*, and ſome others, in regard it would be improper here to Write more Hiſtorically. I ſhall therefore now let you know not ſo much what hath been done by others, as what further diſcoveries have been made by my endeavours, aſſiſted by the careful Pains of Mr. *Henry Moor* an expert Apothecary and Chymiſt of this City.

And here at firſt I cannot but take notice how that opinion hath ſo much prevailed as to be accounted Orthodox, and not only received by Tradition as certain, but Printed as ſuch, that the Body of the Waters is ſo jejune and empty, as to afford little or nothing at all whereby to make a diſcovery of its Nature, and that what impregnates the Baths is not Subſtantially, Materially or Corporally there, but potentially, virtually and formally, or to uſe the Author's own words, *δυνάμει μόνον ἢ ἐνεργείᾳ*, with much more canting after this manner, in a ſmall diſcourſe in Latin written by an Itinerant Exotick; when as a ſlight operation will ſoon evince it, though white and tranſparent of it ſelf, being taken immediately from the Pump, to contain a conſiderable quantity of a Dusky, Gritty, and Saline Matter, with many tranſparent Particles intermixed with it, to the proportion, (as near as I can calculate) of two drams to a gallon of the Water. And this I can aſcertain, having had ſeveral ounces of it done in Earth, Iron, Bell-metal, and Glaſs, and have at

Carolus Claromont *de Art. Myſt. Loc. T. A. pag.* 32.

at this time three or four ounces by me, untoucht, beſide what I have made uſe of in other Experiments.

But the thing I ſhall more Peculiarly inſiſt on, at this preſent, is, That by God's bleſſing on my Induſtrious Search, I ſuppoſe I have lighted on the main Conſtituent of the Virtues of the Bath, in which chiefly reſides what benefit can be expected from the uſe of theſe Waters, and lodgeth in a Saline ſubſtance, in a very ſmall proportion to the Body of the Waters; ſo that as they are now, not much more than forty grains is contained in a Gallon, inſomuch that this little Soul, as I may ſo term it, is almoſt loſt in ſo Gigantick a Body, and cannot animate it with that vigour and activity as may be rationally expected, were a greater quantity of the Salt contained in a leſs proportion of the Water. The Remainder, which is not Saline, being, as I judg, two Parts of Three of the Bulk of the contents, is partly Whitiſh, Gritty, and of a Lapideous Nature, concreting of it ſelf, into a ſtony conſiſtence not eaſily diſſolvable; partly more Light, and Dirty, reſembling Clay, or Marle, and diſcovers it ſelf by an apparent ſeparation from the Saline and Gritty part mentioned before.

Now the chief Virtue of the Bath, as I conceive, conſiſting in the Salts, which appear by undeniable Experiments, to be Nitrous, and I believe Vitrioline (Bitumen and Sulphur being not Primarily, as theſe Salts, but Secondarily concern'd) and no ſmall proportion of other things blended with it, the beſt way to make it moſt ſerviceable I conceived to be, to free it from thoſe incumbrances and allays it hath from the other Ingredients, and prepare it as exactly as may be performed by Art, for the benefit of thoſe eſpecially who are willing to Drink the

the Waters with greater ſucceſs in a leſſer quantity; which they may now do, and have more of the virtue of the Waters in a quart, three pints, or a pottle, than they formerly had in two or three Gallons, did they drink ſo much; which will be, beſides other Conveniencies, a great relief to the Stomach, which certainly muſt be relaxed, and the Tone of it injured by that vaſt quantity of Water which is uſually taken, diluting its ferment overmuch, and diſtending its Membranes beyond all the bounds of a reaſonable Capacity.

Beſides, What is ſeparated only by an artificial Extraction will better unite again, and mix with the Waters, as much more familiar, than the extraneous Salts of *Sal Prunella*, Cream of Tartar, *&c.* which are uſually diſſolved and drunk with the Waters; ſo that a great part of the Operation may be aſcribed to that; and the Waters being, as we ſay, between two Stools, that of it ſelf, and the diſſolvent in it, hath not attained to that degree of Reputation as they have deſerved, and may be procured with much more advantage, if nothing but the ſame be ſpent upon the ſame, a way of Improvement altogether equally beneficial to Fluids and Solids, to the wet as to the dry.

Again, Whereas it is a cuſtom here as in all other places of the like Nature, when Perſons are not willing, or have not conveniences to come to the Fountain Head, to ſend for the Waters to the places of their Reſidence, not thinking it much material whether *Mahomet* go to the Mountain, or the Mountain come to him, whereby the Virtue of the Waters is much impaired, if not ſtopped and ſealed up with very great care; this defect may in good part be ſupplyed by the addition of a Quantity of the ſame Ingredients, which may repair the loſs that hath

hath been sustained by Evaporation in the Carriage, or other way of damage, and restore it again, as near as may be, to its pristine Virtue, and genuine advantage. Not to mention, that if need require, and the poorer sort cannot procure or pay the Fraight for the Waters, they may take a shorter course, by mixing the Salt, which they may have at reasonable Rates, with Spring-Water, brought to a proportionable degree of heat at home, and expect more advantage, for ought I know, than those that drink the Waters themselves at so great a distance.

And because I am now fallen on this Subject, I shall crave leave to remind you of what you well enough understand already, that not only *Dulcius* but *Utilius ex ipso Fonte, &c.* and Waters especially impregnated with volatile Spirits, such as most acid are, and peculiarly Vitrioline, to avoid the inconvenience and expence, not so much of Money as Virtue, in the Carriage, must be drank on the place where they are, which, in some kind resembling Children, that must live by sucking, if once removed from their Mother, or Nurse, by degrees dwindle away, and at last die.

It is observable in these Waters, that with four Grains of Galls injected into a Pint Glass of Water, or the Water poured on it, it immediately turns of a purple Colour, which in short time after, as the Water cools, abates much of its vividity, and becomes more faint: if the Waters be suffered to cool, and be quite cold before the Galls are injected, but little alteration happens upon a much greater proportion of Galls superadded, and (what is more remarkable) if the Water, which is permitted to cool, be recruited by the Fire, and the same Tryal reiterated, it offers no greater satisfaction in change of

of Colour, than the second Experiment. Consonant to what *Andreas Baccius* hath formerly observ'd, who in his second Book *de Thermis*, *Cap.* 10. *Pag.* 69. hath these words, *Nulla Balnei Aqua, eodem cum successu ac laude bibitur longe exportata, quo ad fontem propriam; maxima enim parte ex ipso fonte haustæ ac delatæ, amittunt omnem virtutem; multo non servantur per hyemem, dilutæ pluviis; & quæ utcunque servantur delatæ à propriis fonticulis, fieri non potest, quin amittant, cum calore suo Minerali, vivificos illos Spiritus in quibus omnis Juvamenti vis consistit, quæ semel amissa, nullo postea extrinseco calore restituitur. Quod est valde notandum.*

I have been the more particular in this, in regard it is a very useful and practical Discovery, and may procure more real advantage to Mankind, than the vain and unattainable attempts of the Philosophers Stone, making Glass malleable, and the Quadrature of a Circle.

Some other Observations I shall also mention, of a less magnitude, and more contracted circumference, as the dying of the Bath-guides skins, the Bathers Linnen, and the Stones in the bottom of the Bath, of a yellow colour, and the eating out of the Iron Rings of the Bath, the Iron Bars of the Windows about the Bath, and any Iron infused in it; insomuch as I have now by me a Gad of Iron by accident taken up among the Stones of the Kings-Bath, so much eaten out, and digested by the Ostrich stomach of these Waters, that, the sweetness extracted, what remains resembles very much a Hony-comb, a deep perforation in many places being attempted, and the whole Gad it self reduced to a thing very much like a Sponge.

The first, *viz.* the Tincture I have discovered to arise from an Ochre, with which the Bath abounds,

and hath afforded me a considerable quantity, so that now I have near a pound by me, and with an infusion of that in warm water, tinge Stones as exactly of the Bath colour, that they are not discernable one from another. It is further observable, that the nearer the place of ebullition, where the Springs arise, the deeper and finer is the Yellow colour, so that in some places, about the Cross in the Kings Bath, and at the head of the great Spring, at the Southwest corner thereof, it is almost made a natural paint, being laboured together by the working of the Springs, and a continual succession of new Matter coming on, free from those impurities it contracts in other places, which make it distinguishable into two or three sorts, according to its mixtures with, or freedom from, more adulterating Matter. The Clouts also and Woollen Rags, which the Guides use to stop the Gouts withal, besides the Walls, Slip-doors and Posts, when the Bath is kept in a considerable time, as in the Winter season it useth to be, are all very much tinged with this yellow substance, and if at any time they chance to lie unwash'd or not thrown away, they send out so ungrateful a scent, that a man had rather smell to a Carnation, Rose, Violet, or a Pomander, than be within the wind of so unwelcom a smell, it being the greatest policy to get the Weather-gage in this encounter. The same thing I have experienced in Vessels at home, where after it had stood some time in a common infusion of warm water, I have the same reverence for that as Pictures, and do aver it to be true, *E Longinquo reverentia major.*

One thing more is to be noted before I leave this particular, that although so much of this yellow Matter is continually bred, with which the neighbouring Ground is sufficiently repleniſht, as I have

have found by digging in some places not far distant, yet nothing of that colour is discovered in the Contents, a probable argument it either evaporates, to which I am more inclin'd, in regard I find it much more copious where the Steam of the Bath meets with any resistence, or else it may be, which is less probable, turns colour by the fire in evaporation that way; less probable, I say, because for further satisfaction, I have decocted the Ochre more than once, and find rather that it gets than loses in its colour.

The Reason of this I conceive to be, That this Ochre being probably, as I have elsewhere discourst, the vehicle of Vitriol, on its separation from it in the open air, precipitates to the bottom, and tinges the stones with a yellow colour, leaving the body of the waters through which it passes much unconcern'd; which may be one reason, why the Water of the open Bath tingeth not with Galls, as I have observ'd, like that from the Pumps, though the avolation of Spirits may not perhaps be altogether ridiculous, considering especially, that the water from the Pump when cold, will lose its tinging property, though nothing be observ'd to be precipitated. And that some of this yellow matter is contained in the water, though with some difficulty observed, doth appear from the fifty second Observation.

The greenish colour ariseth from another cause, which I conceive may be the effect either of the Salt or Vitriol, or both, the former making that colour in meats long in salt, and the latter, if from green Copperas, may easily be understood.

The eating out of the Iron I conceive must proceed from something Corrosive, and till any one can assure me 'tis something else, I shall judge

it to be Vitriol, though the Salt also may contribute not a little. And that it may appear not to be caused by the bare steam, as Rust is bred upon Pothooks and Cotterels, besides the difficulty to conceive how the steam should operate under water, as in the case of the Gad before mentioned, I made a Lixivium of the contents of the Water, and in it infused Iron but a very small time, and found it to do the same as in the Bath it self, considering the time of infusion; and the very Knives and Spatules I put in to stir some residence in the bottom, were almost as soon as dry, crusted over and defended with a rusty coat.

I have other Arguments I suppose will contribute something more to the confirmation of this opinion; as that with the help of the Sand of the Bath, with Water and Galls, I made good writing Ink, which in a short time comes to be very legible; but the infusion of the Contents in Common water, or the Lixivium thereof, with an addition of an inconsiderable proportion of the decoction of Galls makes it tolerably legible on the first commixture, only the first, *viz.* that made with Sand, casting an eye of decayed red from a mixture of Ochre contained in the same. Neither is it altogether to be slighted, that the Water it self hath been heretofore used by the best writing Masters for the making of Ink, who observing by their experience, that Ink made with Bath-water, and the other usual Ingredients, had a better colour, and was more lasting than any other, preferred this Water before any other for this use, as I have been informed by some credible persons. Also having not long since occasion to pour warm water on the Contents of the Bath, in order to the making a Lixivium, some of the water happened by an accident to fall on a

Bazil

Bazil skin I ſometimes uſe, and immediately turned the Red into a Black more than the breadth of an ordinary hand, with as much facility as any Curriers Liquor. Alum I know will do the like, but I find no neceſſity to aſſert that, which had it any thing to do here, muſt make the Water much rougher, whiter and ſowrer, than I find it to be. To which I may add, that many judicious perſons, my Patients, and ſome intelligent and eminent Phyſicians alſo have aſſured me, that they have perfectly diſcerned by the taſte a mixture of Vitriol, and that I need not doubt, but that was one principal Ingredient. 'Tis alſo not very inconſiderable, that the Bath-water alone will coagulate Milk, though not after the uſual way of making a Poſſet; for after the Milk and Water are put together, it muſt boil pretty ſmartly, elſe the Curd will not riſe. I may likewiſe ſubjoyn as a further probability, that on the relenting of the Salt extracted into an Oyl *per deliquium*, there is a very ſharp Stiptick and Vitrioline taſte perceived in the groſs *deliquium*, as alſo in the clear Oyl, and the Salt it ſelf; not to mention its ſhooting into glebes, of which I have ſome ſmall aſſurances by trials I have made, not yet ſufficiently ſatisfactory, and therefore I diſmiſs this part for the preſent, with the greateſt probability, till a further inquiry ſhall make me poſitive.

But as to Nitre, there can be no queſtion made about that I ſuppoſe; for beſides the quick, acrimonious, cooling, and nauſeous taſte, moſt apparently diſcoverable both in the infuſed contents, the Salt and Oyl (the latter of which, *viz.* the nauſeous Taſte, I take more particular notice of, in regard it is moſt predominant, and aſſigned by *Fallopius* to Nitre, and the Waters impregnated with it, which,

he says, sometimes do *subvertere stomachum*, & *facere nauseam*, *de Therm. Aq. & Met. cap. 9.* besides, I say, these probable conjectures) what will set it beyond all contradiction, is, that it hath the true Characteristick of Nitre, and shoots in Needles, of which I have now lately shot above twenty *Stiriæ*.

I the rather mention this, in regard it hath been my good hap to bring this thing to perfection and autoptical Demonstration, which hath been in vain attempted by some industrious persons; not that I am, in the least, willing to arrogate to my self, or derogate from them, more than what is fitting, but to confirm this truth, that there are some *Mollia tempora fandi*; some opportunities, when Nature will give willing audience, without much ceremony or ado, confessing more by fair perswasions, than racks and torments, and greater importunity. And that we ought to be very cautious how we affirm a thing not to be, upon the failure of a single, or some repeated Experiments.

In fine, Lest I should too much exceed the bounds of a Letter, what concerns the cause of the Heat of the Waters, I say little of here, only tell you, that when I shall come to discourse of that Subject, of which I intend, God willing, a large Disquisition in another Language, I believe I shall find my self obliged not so much to depend on a subterranean Fire, as to expect greater satisfaction from another Hypothesis.

Many more Experiments I have made upon the Sand, Scum and Mud of the Bath, with some Observations drawn from the *Natura Loci*, or Ground hereabouts; but, I fear, I have been too tedious already, and therefore, without further ceremony,

ceremony, ſhall releaſe you out of this Purgatory, with the Subſcription of,

Honoured Sir,

Your moſt Faithful, &c.

CHAP. IX.

Of the Antiquity of the Baths and City.

AND now it may be expected I ſhould ſay ſomething concerning the Antiquity of the Baths and City, which I the rather do here, in regard ſince my writing any thing of this kind heretofore, in many Particulars I have met with better information.

Not to mention any thing of *Bladud*, and the *Britiſh* Hiſtories, as at beſt, uncertain, I ſhall firſt take notice of the Opinion of thoſe that aſcribe their diſcovery to *Julius Cæſar*, fifty years, or thereabouts, before Chriſt, which the Learned Antiquary Mr. *Cambden* thinks not ſo probable, becauſe *Solinus*, who lived in the time of *Titus Veſpaſian*, 130 years after, and 83 (rather 81) years after Chriſt, was the firſt of the *Romans* that made mention of them. But if it be uncertain when *Solinus* lived, and moſt likely after the year three hundred, as my Judicious friend, the Reverend and Learned Dean of *Bangor* hath obſerv'd, then the Antiquity reaches not ſo high.

Gu'. Malm.

Br. p 234.

Dr. Will. Lloyd.

To which may be added moſt aſſuredly, That *Julius Cæſar* came not ſo far up into the Land: For

whatever ſome Poets and Poetical Hiſtorians that lived a thouſand years after him, may deliver, certain it is that *J. Cæſar* made not ſo great a Conqueſt here as they made for him; whence *Tacitus* writes, That he diſcover'd only, not delivered unto the *Romans*, *Britain*. His words in the life of *Julius Agricola* are theſe; *Primus omnium D.* Julius *cum exercitu* Britanniam *ingreſſus, quanquam proſpera pugna terruerit incolas, ac littore potitus ſit, poteſt videri oſtendiſſe poſteris, non tradidiſſe.* *Horace* alſo calls the *Britain*, before *Auguſtus*, Untoucht;

Lib. Epod. *Od.* 7.

Intactus aut Britannus *ut deſcenderet*
Sacra Catenatus via.
Nor yet, Th'unconquered *Britain* to convey
Captiv'd, in Chains, down Sacred way.

And *Cambden* ſaith, That 'tis ſo far from being true what *Paterculus* reports, *Bis penetrata* Britannia *à Cæſare*, That *Cæſar* paſſed twice through *Britain*, or twice a great way into *Britain*, which is all can well be underſtood by thoſe words of that Hiſtorian, that he ſcarce made entry into it. For many years after this Entrance of *Cæſar*, the Inhabitants of this Iſland were left to the free government of their own Kings, and uſed their own Laws.

Twin. Comm. P. 146, 147.

Another Learned Antiquary treating of *Cæſar*'s Conqueſt here, is of opinion that it extended no farther than *Kent*, ſome part of *Suſſex*, *Surrey*, *Middleſex* and *Eſſex*, and perhaps, as the Learned Dr. *Lloyd* hath further noted, into the edge of *Berks*, *Oxford* and *Bucks*; for he mentions the *Bibroci* and *Anealites*, which *Cambden* with good probability places there. The words of *Twine* are theſe; *Mihi quidem videtur univerſum* Cantium, Suſſexiæ *vicina loca*,

De Bell. Gall. lib. 5.

loca, & Suthreiam, quæ Regni nomine, itemque Middlesexiam *& Essexiam, qui hodiè à Doctorum vulgo,* Trinobantum *appellatione intelliguntur, legionibus suis invasisse; nec, si ad plures penetrasset, aut in gratiam recepisset, puto præterire silentio valuisse. Reliqui vero populi manus quidem dederunt, quorum tamen regiones nunquam à* Cæsare *conspectæ sunt.* *To me, indeed, it seemeth probable, that* Julius Cæsar, *with the Souldiers under his Command, conquered all* Kent, *the neighbouring parts of* Sussex *and* Surrey, *called by the name of* Regnum, *also* Middlesex *and* Essex, *which the Learned call* Trinobants; *neither do I believe but that if he had conquered or made peace with more, he would have mentioned them: Some other Inhabitants nearest to danger yielded, whose Country* Cæsar *never saw.*

The *Saxon* names of *Bathanceſter*, *Hat Bathan*, and *Akmancheſter*, are of later date, the *Saxons* not arriving here till the time of *Theodosius* the younger, about the year of Christ, according to the most probable account of Venerable *Bede*, 449. *Hist. Eccl.* Nay the later name of *Akmancheſter* was not given *l.1.c.15.* till some few years after the year of Christ 577; when from a mean condition, to which this City was then reduced by War, it again recovered strength and great dignity, and from the great concourse of Diseased people that came for Cure, was called *Akmancheſter*, or, The City of Sickly folks.

Anno 575. saith the *Saxon* Chronicle, *the City of* Bathe, *as also* Gloceſter *and* Ciceter, *were taken by* Cuthwin *and* Ceaulin *the* Saxons *from the* Britains, *after the slaughter of three* British *Kings*, Commail, Condidan, *and* Farinmail, *that year in a battle at* Deorham.

Neither can their Antiquity be much more advanced

vanced by the Ὕδατα θερμὰ, or Hot waters in *Ptolomy*, who flourisht about *Anno Christi* 161, being also the first year of the Reign of the Emperour *Antoninus*; *Aquæ Solis*, or Waters of the Sun of *Antonine*, or *Badiza* of *Stephanus*, who lived *Anno Dom.* 540. But what may seem to some of greater consequence are the *British* Names of Ys Ennaint Twymin, as *Cambden* hath it, or rather Caer Ennaint, the *City of Oyntment*, from the Diseased people that came hither for relief, *Ennaint* in Welch signifying *Unguentum*: or else, Caer yn nant Twymin, the *City in the warm Vale*; whence *Bristol* was anciently called, Caer Oder yn nant Badon, the *City Oder in the Vale of Bathe*. *Caer Baddon*, or *Bathon*; and *Caer Paladdur*, the City of *Pallas*, or *Minerva*'s Water; especially since *Solinus* affirms *Minerva* to have been the Patroness of these Baths, if of them he writes, as most probable, in these words, *Chap.* 25, where speaking of *Britain*, he saith, *In quo spatio magna & multa flumina sunt, fontesque calidi opiparo exculpti apparatu ad usus mortalium: quibus fontibus præsul est* Minervæ *numen in cujus æde perpetui ignes nunquam canescunt in favillas, sed ubi ignis tabuit, vertitur in globos saxeos*; i.e. *In which space are many great Rivers, and Hot springs, very curiously adorned and kept for mens use, the Patroness of which is the Goddess* Minerva, *in whose Temple perpetual fires never turn to ashes, but when the heat is over, become round lumps of stone.* There being also a Tradition here, that there was formerly a Temple dedicated to *Minerva*, where the Church of St. *Peter* and *Paul*, commonly called the *Abbey-Church*, now stands. I say, if *Solinus* writes of them, because the Baths of *Buckstones* in *Darbyshire* are likewise in *Britain*, and were formerly much frequented.

H. Lloyd. *Fragm. descr. Brit* p. 16.

I know very well that *Mons Palador* was a name amongst the *Britans* for *Shaftsbury*, Palad; in that Language signifying a Shaft; but *Pontieus Virunnius*, who lived 1500 years since Christ, corruptly calls it *Paladur*; Rudhudibras *condidit oppidum Montis Paladur quod nunc* Sefronia *dicitur*; and therefore gave occasion to some inconsiderate persons to confound it with *Bathe*: Now although any one that knows a Mountain from a Plain may see the difference, yet I must be so impertinent here as to say, That I see no reason to the contrary but that *Palladdur* may be two words, and rendred *Minerva*'s Water; Dwr being the word for Water in *Welsh*, and *Mons Palador*, *Palade*, or Palad, as it should be written, and *Caer Palladdur*, to be two distinct places; the former *Shaftsbury*, the latter *Bathe*: However if *Cambden* be mistaken, and my self also following his Authority, we are both under the correction of those that have better converse with the *British* Writers.

Mr. Tho. Wilkins, *Prebend of Llandaff.*

I shall only add, That *Ptolomy* reckons *Therma* and *Ischalis* as Cities of the *Belgæ*, whereof *Ischalis*, now *Ilchester*, he places in 16 degrees 40 minutes of Longitude, 53 degrees 30 minutes of Latitude; and the other City *Therma*, or *Bathe*, in 17 degrees 20 minutes of Longitude, and 53 degrees 40 minutes of Latitude.

Antoninus his Itinerary hath *Aquæ Solis* in the way between *Venta Silurum*, now *Caer Gwent*, and *Verlucio*, now *Warminster*: from *Venta* to the ferry over Severn, called *Trajectum*, he makes six miles; from that Ferry to *Aquæ Solis* eighteen miles, and from *Aquæ Solis* to *Verlucio* sixteen miles. This may serve to prove, that *Therma* in *Ptolomy*, and *Aquæ Solis* in *Antonine*, were meant of *Bathe*.

Let this then suffice for the Antiquity of the Waters,

Waters, That we have a Tradition, and the Authority too of some suspected Writers, that the Baths were discovered eight hundred and odd years before Christ: That not long after Christ, we have undoubted mention made of them in credible Authors, and that doubtless they were known, and made use of too, long before any Author writ of them: So that to trace their Original, is to unravel the Creation, and to make enquiry for their commencement, little different than to seek after the Head of *Nile*.

To give but a taste of the Philosophy of the Times, but little more than two hundred years ago, in reference to these Waters, I shall mention a part of the Riming History of Unfortunate Princes, composed by *John Boccace*, who lived about *A.D.*1450, and translated by *Dan. Lidgate*, where fol. 31, *Bladud* speaks thus:

I.

Some say I made the Holesom Baths at Bath,
And made therefore two burning Tuns of Brass,
And other twain seven kinds of Salts, that have
In them inclos'd; but these be made of Glass;
With Sulphur fill'd, Wild-fire emixt there was.
And in four Wells those Tuns so placed heat, for aye
The Water springeth up before it pass away.

II.

Which Waters heat, and cleansing perfect power,
With vapours of the Sulphur salts and fire,
Hath vertue great to heal, and cleanse, and scower
The bathed Sores therein that health desire.
If of the Vertues more thou dost require
To know, I will recite what old Experience tells
In Causes cold, the noble Vertues of those Wells.

III.

III.

The Baths to soften Sinews Vertue have,
And also for to cleanse and scowr the skin;
From Morphews white and black to heal and save;
The bodies freckled, faint, are bath'd therein,
Scabs, Lepry, sores are old, and fester'd in (mors fell,
The Scurf, Botch, Itch, Gout, Pox, swell'd Joynts and hu-
The Milt and Liver hard it heals, and Palsey well.

IV.

I must confess, by learned skil I found (men.
These Native Wells whence springs that help for
But well thou knowst, there runs from under ground
Springs, sweet, salt, cold and hot, even now as then,
From Rock, Salt Peter, Alom, Gravel, Fen,
From Sulphur, Iron, Lead, Gold, Silver, Brass and Tin,
Each fountain takes the force of vein it coucheth in.

V.

Then whoso knows by Natures work in these
Of Mettals or of Mines the force to heal,
May sooner give his Judgment in disease
For curing by the Bath; and surer deal
With sickly people of the Publick weal:
And also find of Fountains salt, or hot, or cold,
And for to heal by them the sick with honour be bold.

VI.

The City eke of Bathe *I founded there,*
Renowned far by reason of the Wells:
And many Monuments that ancient were,
I placed there, Thou knowst the story tells, &c.

What probability the Philosophical part of this Poetry may carry concerning the seven kinds of Salts

Salts inclosed in four Tuns, and things relating thereunto, may be concluded much from what is Historical, and mentioned in the last place, concerning the Monuments, which cannot possibly pretend to that Antiquity, being not in the least *British*, but purely *Roman*, as is made appear in the following Chapter; This therefore is to be taken as a fancy, and so let it go.

Alexander Necham, somewhat above 400 years ago, wrote these Verses on the Baths.

Bathoniæ Thermis *vix præfero* Virgilianas
Confectio prosunt Balnea nostra Seni;
Prosunt attritis, collisis, invalidisq;
Et quorum morbis frigida Causa subest.
Prævenit humanum stabilis natura laborem,
Servit Naturæ legibus Artis opus.
Igne suo succensa quibus data Balnea fervent
Ænea subter aquas Vasa latere putant.
Errorem figmenta solent inducere passim,
Sed quid? Sulphureum novimus esse locum.

Which I thus made English:

Bathe Baines with *Virgil*'s I compare,
Useful for ancient folk they are,
Bruis'd, weak, consum'd, as well as old,
And in all griefs whose source is cold.
Nature mans Labour doth prevent,
And Art again serves her Intent.
There's fire under ground some say
That thus makes Baths great Pots to play.
Fancy doth often Error breed,
But what? from Brimstone these proceed.

As

As to the City, it is not, I think, to be doubted, but that the Baths were before that, and gave name to it, sick people making small Cottages first for their Conveniences, which were afterwards improved into fairer Buildings. *Constat Latinum nomen huic Civitati ab Antiquis inditum, Aquæ Calidæ ex his Balneis*, saith *Andr. Baccius*, if the Testimony of a Stranger may be admitted; *It is certain the City was called* Aquæ Calidæ, *from the Baths*. The Statues also of *Coil* a Brittish King, and *Edgar* a Saxon, who are said, how truly I know not, to have given Charters to this City, placed at the end of the Town-Hall, or Council-House, are arguments of its Antiquity, although perhaps they might be Patrons that were chosen by the Monks.

That *Edgar* was Crowned at *Bathe* above 700 years ago, *Bathe* being then called an *Old Borough*, with great Solemnity, on *Whitsunday*, appears from these words of the *Saxon Chronicle*, written by one that then lived, and writ his History but three years after his Coronation. *Anno* 973. May 11. *being* Whitsunday, Edgar *was Consecrated King with great glory, in that* Old Borough Akemannesceastre, *which by another name they call* Bathon, *there was great joy to all men on that Blessed Day, which they call* Pentecost; *there was a great Assembly of Priests and Monks, and the Wise met there in Councel.*

Edgar had lived 29 years full of trouble and misery, when this came to pass, and in his 30th. year was Consecrated.

Anno 520. or 71 years after their arrival here out of *Germany*, the *English Saxons* besieged this City, with whom K. *Arthur* fought a great Battel on *Mons Badonicus*, now called *Bannesdown*, and slew

slew so many of them, that they had little heart to make any further attempt for a considerable time, but left it to the quiet possession of the *Britains*. Yet *Ninnius* writeth, that the 12th. of K. *Arthur*'s Battels against the *Saxons*, was at the Hill or Town of *Bathe*, where many a one was slain by his force and might. The *Saxons* then had besieged *Bathe*, K. *Arthur* rais'd their Siege, and after besieged them
Dr. *Lloyd.* on *Mons Badonicus*, where he took their Camp, made a great slaughter of them, and then kept his *Christmas* in *Bathe*. This was the year that *Gildas* was born, and thereupon was called *Badonicus* ever after.

Anno 676. *Osbrich* founded here a Nunnery, and not long after *Offa* K. of *Mercia* built a Church, both which in the time of the *Danish* Wars were demolisht. Out of the Ruines of these two arose the Church of St. *Peter*, in which *Edgar* was Crown'd. But more of the Church in its place.

Anno 775. the year in which *Offa* is said to have began this Church, he fought with *Kinewulf* K. of the *West-Saxons* at *Bensington* near *Oxford*, overcame him, and took *Bensington*. This *Offa* is said to have spent much of his time at *Bathe*; *Ille* Offa
MS. (saith the Author of *Brutus abbreviatus*) *multum morabatur* Bathoniæ. He began his Reign *Anno* 755. reigned 39 years, and died *Anno* 794.

In the Time of *Edward* the Confessor *Bathe*
Doomr day Book. flourished exceedingly, the King having there 64 Burghers, and 30 Burghers of others, the City paying Tribute according to 20 Hides, which amounts to about 30 yard Land.

Cambden. In the Reign of *William Rufus*, *Robert Mowbray*
Br. f. 234. Nephew to the Bishop of *Constance* sackt and burnt it.

The

The Industrious Mr. *Pryn* in his * *Brevia Parliamentaria rediviva*, and † 4th. part of a brief Register of Parliamentary Writs, hath given an account of Citizens return'd to serve in Parliament for this City, ever since the 26th. year of K. *Ed.* 1. about *A. D.* 1298. or 377 years since. * P. 298. † P. 299.

In *Bathe* are three Hospitals, it self, indeed, being but one great one, St. *Johns*, *Bellots*, and the *Bimburies*, otherwise called St. *Katherines*, besides a Free-School erected in the Time of *Ed.* 6.

The Hospital of St. *Johns* was founded *A. D.* 1174. by *Reginald Fitz-Joceline*, a *Lombard*, Bishop of *Bathe* and *Wells*, and afterward translated to *Canterbury*, but, before he was possessed of his new honour, died, and was buried at *Bathe*. It was valued at the yearly Rent of 22 *l.* 19 *s.* 6 *d.* since which time its revenues are much increas'd, to the great advantage of him that hath it, and no less profit and reputation to the City, with the perpetual entailment of God's everlasting curse and blast, on the treacherous head and posterity of him, that is notoriously known to have been the Author of this mischief. He gave it this name from St. *Johns* in the *Savoy*, where he was Consecrated Bishop, after his return from beyond Sea, by *Richard* Archbishop of *Canterbury*. Godwin Cat. p. 364

Bellots Hospital was built by *Thomas Bellot* Esq; one of the Executors of the Lord *Cecil*, in the Time of K. *James*, of whom we shall treat more largely in the Chapter of the Church, to which he was an especial Benefactor.

As for the *Bimburies*, I can learn no more concerning it than this, That it was built by seven Sisters, who left this Hospital behind them as a monument to Posterity, both of their Charity and Name.

CHAP. X.

Of the Roman *Antiquities in* Bathe.

BUT the greateſt Argument of Antiquity the Place affords, I ſuppoſe to be the *Roman* Coins found in or near it, with the Inſcriptions and Images in the Town or Borough Walls, the latter of which, to wit, the Inſcriptions and Images, Mr. *Cambden* took notice of, and inſerted into his *Britannia*.

To begin with the *Roman* Coins: The firſt I ſhall mention is that of *Veſpaſian*, made 1600 years ſince, this Emperour's Reign beginning *A. D.* 71. with this Circumſcription on the Face-ſide: IMP. CAES. VESPASIAN. P. F. AUG. *Imperator Cæſar Veſpaſianus, Pius, Felix, Auguſtus.* The Reverſe; PIETAS AUGUSTI, with an Image between S. C. ſignifying *Senatus Conſultum.* This is of Braſs, and Communicated by Mr. *John Parker* of *Bathe*, where it was alſo found.

The ſecond is of *Trajan*, made *A. D.* 101. the year this Emperour was 5th. time Conſul; read thus: IMP. TRAIANO. AUG. GER. DAC. P. M. T R. P. *Imperatori Trajano Auguſto, Germanico, Dacico, Pontifici Maximo, Tribunitia poteſtate.* Reverſe; COS. V. P. P. S. P. Q. R. OPTIMO PRINC. *Conſuli quintò, Patri patriæ Senatus Populuſq; Romanus optimo Principi.* This is Silver, and was found at *Wrigleton* five miles off of *Bathe*, and given by Mr. *Hugh Ivy*, Rector there.

A third is of *Carausius*, who usurpt Empire in *Britain Anno Christi* 285. reigned seven years, was slain by *Alectus* who usurpt after him, and was himself killed by *Asclepiodotus præfectus Prætorio Anno* 295. The Circumscription thus: IMP. C. CARAUSIUS P. F. AUG. *Imperator, Cæsar Carausius, Pius, Fœlix, Augustus.* On the other side PAX. AUG. *Pax Augusti.* And underneath an Image M. L X X. denoting *Miles*, or *Milites Legionis vicesimæ.* A Souldier, or the Souldiers of the 20th. Legion, with B. E. on both sides of the Image signifying *Britannicus Exercitus.* *

The fourth is of *Constantine* the younger, made Cæsar together with *Licinius* and *Crispus* in *March, Anno Christi* 316. with these Letters round the Head: CONSTANTINUS IUN. NOB. C. *Constantinus Junior Nobilissimus Cæsar.* The Reverse a Palace, and PROVIDENTIAE CAESS. *Providentiæ Cæsarum.* It is the Palace in which he lived at *Triers*, expressed in the Letters underneath P. T R E. that is, *Pecunia Treviris.*

The fifth of *Alex. Sever. A. D.* 224. with this Inscription: IMP. C. M. AUR. SEV. ALEXAND. AUG. *Imperator Cæsar Marcus Aurelius Severus Alexander Augustus.* The Reverse, P. M. T. R. P. II. COS. P. P. *Pontifex Maximus, Tribunitia potestate Secundo Consul, pater patriæ.* These three are Brass, and were found in *Bathe*, and given by Mr. *Parker.*

The sixth is a Coin of *Constantius* made *Anno Christi* 357. in *May*, when he kept his *Vicenalia*, as appears by *Votis XXX. Votis triginta, Multis XXXX. Multis quadraginta*, within a Wreath. On the Reverse, The Coin stampt at *Constantinople*, as is evident from the Letters P. CON. signifying *Pecunia Constantinopoli.* On the Face-side D N.

* *If* M. X X. *as it rather seems, it may denote* Miles, *or* Militia vicesima,

CONSTANTIUS P. F. AUG. *Dominus Conſtantius Pius, Felix, Auguſtus.* This is Silver, and was found in *Glocesterſhire*, not far hence, and given by Mr. *Edward Barnard*, a skilful Bone-ſetter at *Tedbury* in that County.

The ſeventh is a Braſs piece of *Valentinian* the Second, who Reigned *A.D.* 375, with this Inſcription on the face-ſide DN. VALENTINIANUS P. F. AUG, *Dominus Valentinianus Pius Felix Auguſtus.* The Reverſe, *Victory* holding a Palm-branch in the left hand, and offering a Garland with the right; the Motto, SECURITAS REIPUBLICAE, and P. CON. *Pecunia Conſtantinopoli*, underneath.

The eighth is a Braſs Coin of *Conſtantine* the Great, about the year of Chriſt 307, with this Inſcription CONSTANTINO CAES. *Conſtantino Cæſari.* Reverſe, *Victory* with a Spear and Shield, only theſe letters under P. TRE. *Pecunia Treviris.* Theſe two were the gift of that Worthy Gentleman *John Harington* Eſquire, Grand-ſon to the Ingenious and Noble Sr. *John Harington* (of whom more in the Chapter of the Church) and were found in his own grounds at *Kelſton*, three miles diſtant Weſt of *Bathe.*

Theſe are all the Coins I have met with yet of any value, among many others of none at all.

The Inſcriptions and Images next ſucceed; and the firſt I take notice of is the neareſt to the North-gate, being a Memorial of a *Roman* Senator, of the Colony of *Glocester*, a City Built by the *Romans*, who alſo placed there a Colony called *Colonia Glevum.* The Inſcription thus:

Cambd. Br. p. 3. o.

D E C.

DEC. COLONAE GLEV. VIXT AN. LXXXVIII.

i. e. *Decurioni Coloniæ* Glevi. *Vixit annos Octoginta octo.*

Leaf set folded in are at the East end of this Inscription, Fig. 13. *A little lower more leafage not expreſt.*

And whereas I render *Decurio* a Senator, I pitch on this ſignification of the word as moſt proper here, of which *Roſinus* gives this account: *Senatores in Coloniis, ut etiam in Municipiis, Decuriones vocabantur, eam ob cauſam, quod*, Pomponio I. C. *Authore, decima pars eorum qui deducerentur, ſit ſolita Conſcribi.* I know *Feſtus* mentions another and more uſual ſignification of the word, to wit, an Officer over 10 Horſemen; *Decuriones*, inquit, *appellantur qui denis Equitibus præſunt.* Of which if any pleaſe to underſtand it, he ſhall have my leave. Ant. Rom. l. 10. c. 24.

The next is a little Image about a foot and half in length, ſuppoſed by Mr. *Cambden* to be *Hercules*, bearing his left hand aloft, with a Club in his right. *See Fig.* 11.

Next to that lower, toward the Weſt-gate, is the Monument of one of the Children of two *Romans*, *Primulus*, *Romulus*, *Vipomulus*, or rather *Veteromulus* (for that word in the ſtone is ſomewhat difficult to be read) and *Victiſarina*, with a longer and exactly *Roman* Inſcription, in a ſepulchre Ta-

ble, between two little Images, whereof the one holds the Horn of *Amalthæa*, or *Cornucopia*; the other bringeth a flying Rowl, or winding Lift or Banner over the left shoulder.

The Inscription thus:

D M
SVCC. PETRONIAE. VIX.
ANN. III. M. IIII. D. IX. VERO
MVLVS. ET. VICTSARINA
FIL. KAR. FEC.

Diis Manibus Succeſſæ Petroniæ, *Vixit annos tres, menſes quatuor, Dies Novem.* Veteromulus & Victiſarina *filiæ* Cariſſimæ *fecerunt: i.e.* To the Ghoſt of *Succeſſa Petronia*, who lived three years, four months, and nine daies. *Veteromulus* and *Victiſarina*, in memory of their dear Child, made this.

This Inſcription Cambden ſent to Gruterus; and may be ſeen in Grut. Inſcript. pag. DCC. fig. 6.

A little after follow theſe Letters, in a Cut ſtone, very imperfect:

V R N.
I O P.

In

In the outside of the Wall, pretty high, is a Head, which seems of no great moment. *Fig.* 9. And as for *Hercules* straining two Snakes, I cannot yet be so fortunate as to light upon it. *Fig.*14.

Between the West and South-gates stand these Letters cross, which, by reason the stone is cut on both sides, are unaccountable:

III. VS. SA:
IS. VX. SC:

Then two fierce heads, one within the cope of the Wall, and another in the outside thereof hard by. *Fig.*7,8.

After that, these Letters standing overthwart, of which no sense can be made:

I L L A.
I L L A.

Near this place formerly was a Hare running (now lost) which might be the *Rebus* of a *Leporius* that set up this Monument. There were of that name in *Britain*, and it is now the name of the Honourable Family of my Lord of *Colerain*. *Fig.*15.

An angry man laying hold of a poor Peasant, which may be a bold insulting *Roman*, on a poor distressed captivated *Britan*. *See Fig.*6.

Leafage, with leafs folded in, *Fig.* 5.

Two kissing and clipping each other, which by the Crook in the right hand of one, and the Dog upon the other, seem to be a Shepherd and his Mistress;

ſtreſs; the Dog reaching up towards the head of the Woman. *See Fig.* 4.

A Foot Souldier brandiſhing his Sword, and bearing out his Shield. *Fig.* 3.

A Footman with a Truncheon in his right hand. *Fig.* 2.

A great Face, or a Giants Head, with hair. *Fig.* 1.

As for *Meduſa*'s head all Snakes, I cannot, on the beſt enquiry I can make, find it out. *See Fig.* 10.

Neither doth *Ophiuchus* occur to me. 'Tis therefore, I believe, loſt in the alteration of the Wall, as the Hare, and *Meduſa*'s head mentioned before. *See Fig.* 12.

At *Walcot*, a Pariſh adjoyning to the City, was found a ſtone with this Inſcription:

VIBIA IVCVNDA

H. S. E.

i. e. *Here lies* Vibia Jucunda.

Jucunda was an *Agnomen* of the Family *Carvilia*, and it ſeems of *Vibia*, as *Lætus* of the *Clandia* and *Pomponia*.

In

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In *Bathe* also might be seen this Inscription,
On *Henry Coriat.*

MORTUUS. HIC. ET. SEPULTUS. JACET. BIPEDUM. NEQUISSIMUS. *H. C.* IMPIETATE. ARROGANTIA. LOQUACITATE. IMPUDENTIA. FASTU. ET. FRAUDE. NULLI. SECUNDUS. MALUS. PARENS. GUBERNATOR. PEJOR. CIVIS. PESSIMUS. QUI. POSTQUAM. LX. ANNORUM. CURRICULUM. RAPINIS. ET. LITIBUS. ARMATUS. ET. INERMIS. LONGANIMITATE. DEI. MAXIMA. TRANSEGISSET. PAUPERUM. PTOCHOTROPHII. S. JOANNIS. BATHONENSIS. ALIMONIAM. IN. ALTERIUS. MANUS. PERFIDE. DEDISSET. ET. FISCUM. CIVITATIS PUBLICUM. IN. PRIVATOS. USUS. CONVERTISSET. INTER. ALIORUM. ODIUM. CONSANGUINEORUM. MISERICORDIAM. SINE. PLANCTU. ET. LACHRYMIS. A. NEMINE. DESIDERATUS. EX. HAC. VITA. MIGRAVIT. IN. VENTURAM. UT. POENAS. AEQUALI. IMPUDENTIA. SUSTINEAT. AETERNAS. NISI. EIDEM. SUCCURRAT. QUOD. MINIME. SPERANDUM. SALUS. ALTISSIMI. QUAE. ILLUM. QUIDEM. IPSA. NON. POTUIT. SALVARE.

Lastly, There are two fair Inscriptions, in two Grave-stones, erected in the North wall of a Garden

den by the Croſs Bath, belonging to Mrs. *Croſts*, preſerved by Mr. *Robert Chambers*, Father to Dr. *Humphry Chambers*, born in this City, between which, *Robert Chambers* hath this Inſcription, which preſerveth him as he has done the other two.

HEC. MONUMEN. VIO
LATA. SVLCIS. IN. CA
MP. DE. WALCOT. R.C.
CVLTOR. ANTIQ. HVC.
TRANSTVLIT. ANo.
VER. INCAR. 1592.

The Inſcription on the Eaſt of this, is an Epitaph of *Caius Murrius*, of the Tribe called *Arnienſis*, the 25*th.* Tribe among the *Romans* (ſo called from *Arnus* a River in *Tuſcany*, as *Carolus Sigonius*, and *Onuphrius Panvinius* relate,) born at *Friuli*, or *Forum Julium*, a modeſt Souldier of the Second Legion called, *Adjutrix pia fælix*, under the Command of *Julius Secundus*, 25 years of age; how long in pay is broken out of the Stone, but, I ſuppoſe, eight. The Inſcription as follows:

C. MVRRIVS.
C.F. ARNIENSIS
FORO. IVLI. MO
DESTVS. MIL.
LEG. II. AD. P. F.
IVLI. SECVNDI.
AN. XXV. STIP.
H. S.

Caius Murrius, Caii filius, Arnienſis, Foro-Julienſis, Modeſtus Miles Legionis Secundæ, adjutricis piæ, fælicis Julii Secundi, Anni Viginti quinque, Stipendio octo, Hic ſitus eſt.

The

The other on the West is an Epitaph of *Marcus Valerius* a Latin (as I read, Mr. *Cambden Latinus*, it seems to be an *Agnomen*) a Souldier of *Augustus* his Legion (or the 20*th*.) 35 years of age, and 20 years in pay.

The true Copy thus:

DIS MANIBUS
M. VALERIUS. M.
FIL. LATINUS. C. EQ.
MILES. LEG. XX. AN.
XXXV. STIPEN. XX.
H. S. E.

i.e. *Dis Manibus. Marcus Valerius Marci filius Latinus Coh. Equitum Miles legionis Augustæ (aut vicesimæ) annis triginta quinque, Stipendio viginti, Hic situs est.*

Where it may be noted, that this man was admitted at 15 years of age, when the usual time of listing Souldiers was not till 17. *Al. ab. Al. Gen.* Dier. l. 1. c. 20.

Ophiuchus, *Hercules* straining two Snakes, *Medusa*'s head, and the Hare, are lost. *Vid.* Fig. 10. 12. 14, 15.

CHAP.

CHAP. XI.

Of the Church of St. Peter *and* Paul *in* Bathe.

COncerning that neat and curious fabrick, the Church of St. *Peter* and *Paul*, commonly called the Abbey Church in *Bathe*, I need not give any other account, than what Sr. *John Harington*, a neighbouring Knight, whose good will to this Church and City did rival the acuteness of his Wit and Learning, being both very great, hath done sometime since, in a Latin Poem writ and spoken to Bishop *Mountague*, at his first Visitation and sight of the Church, then uncover'd. The Manuscript Copy found in Sr. *John*'s Study, and Communicated by his Grand-son, *John Harington* of *Kelston*, Esquire, hath this Title; *Conditiones variæ Ecclesiæ Sancti* Petri *&* Pauli *Bathonienſis, à primis fundamentis jactis Anno* 775, *ad annum decurrentem* 1609, *Historico-poetica* ἐξήγησις; *deque fœliciſſima ejusdem Ecclesiæ restauratione, Vaticinium. Ad Reverendiſſimum in Christo Patrem*, Jacobum, *providentiâ divinâ, digniſſimum Ecclesiæ Bathonienſis, &* Wellensis, *Epiſcopum, Bathoniam primò fœliciter inviſentem & Visitantem.*

The

The Poem.

Macte: bonis avibus, recidivi limina Templi,
In Christo Reverende Pater, gratissimus intra.
Macte: sed haud pigeat prius, æquo mente, parumper
Pristina Delubri perpendere fata infelix.
Temporis Elapsi studio monumenta revolvens Historia.
Attento, invenies, hujus fundamina templi
Prima Offam, *priscum regem, jecisse: Secunda* An. 775.
Elphegum, *regni Primatem, tertia tandem* 1010.
(*Cum duo* Danorum *rabies, ignisque, priora*
Vastasset) *Sumptu posuit majore* Johannes
De villa, natu Gallus, non infimus artis 1088.
Professor medicæ; Wellensi *ingratior ædi*;
Qui quum illic variis viguisset Episcopus annis
Sedem, Thermopolim, Cathedralem transtulit illinc,
Urbe hac quingentis Marcis, à Rege coempta.
Pulchrius antiquis fanum construxit; *at ipsum*
Ævo, Combussit pariter Jovis ira, sequenti.
Structorem Celebris misit Normannia, *quartum*
Officio Monachum, Rodbertum *nomine, molem*
Subversam toties qui restauravit, & inter 1137.
Presbyteros, litem, de Sedis honore, diremit,
Exornans titulis utramque æqualibus urbem.
Tandem, post seriem numerosam, munificamque,
Insignis præsul pietate, vicesimus atque
Tertius, hunc sequitur, qui faustum nominis omen
Expressit factis, Oliver King *dictus*; *Olivam* 1495.
Et Regem vere referebat: adinstar Olivæ
Pacis erat populo, simul ubertatis & author;
At magis hoc retulit, regali munere, regem,
Quippe opus incultum Rodberti *sustulit: atque*
Illius, extemplo, vice fundamenta locavit

Ista,

Ista; dedit Solidis speciosa pterômata muris.
Tecta superstruxit sublimibus alta columnis.
Areolas Soleis longas substravit & amplas.
Omnia, ad hanc pulchram structurus cætera formam,
Et spoliis, dubio procul, instructurus, opimis,
Morte immortales, subito est arreptus, ad arces.
(Tantæ molis erat tam clarum condere Templum!)
Ne tamen his tantis perfectio debita cæptis
Deforet, huic operi colophonem attexuit almus
Abbatiæ Rector Gulielmus Birdus. *At ebeu*
Sanctis stare diu, fatis (proh fata) negatum est!
Horrida de innocuis fertur sententia fanis;
Abbatiæ pereunt, spoliantur Templa, rapinis
Tecta patent, reditus, fundi, sacraria: quid non?
(Unde nefas tantum Zeli fautoribus?) una.
Ipse, vel in cunis, insons discerpitur infans.
Impete diripitur violento hæc fabrica; prostant
Saxa, vitrum, plumbi, Campanæ, ac omnia præter
Hoc miserum [illegible]. *Tantæ at qua causa ruinæ?*
Num pietatis amor? vel amor sceleratus habendi?
Hic amor exitio est Templis, Templiq; ministris.
Hic amor extinxit clarissima lumina regni;
Nec finit hic amor hæc extincta resumere lucem.
Nemo bonum Templi, Templi bona quisq; requirit.
Hinc hæc, Cimmeriis per tot, tam turpiter, annos,
Maxima lux Urbis, latuit suppressa, tenebris.
Sed pater omni-bonus, cui provida cura suorum est,
Hanc piceam, nuper, cœlesti lampade, noctem
Dissipulit è multis Sanctorum cordibus, unde
Accendere suo nostrum de Lumine lumen.
Sic tamen ut quivis magis hinc sibi luceat ipsi
Ut tacito ad præsens reliquo veneremur honore,
Vivida quos totum celebrabit fama per orbem;
Nobile Bellotti Sidus sic emicat, omnes
Inter nutritios Templorum jure colendos,
Plena velut Stellis præfulget Luna minutis.

Singula

Singula quæ cerui pulchræ ornamenta Capellæ,
Area, porta, solum, subsellia, rostra, fenestræ,
Bellottum unanimi compellant voce parentem.
Bellottum Sonitu reboat Campana Sonoro,
Πανηγυρίζει sonant Bellottum, Balnea, Vici,
Compita, Bellotti jactant ad sidera nomen.
Quod Christi est cultor, simul excultorq; sacrorum.

VATICINIUM.

Desine plura: sat est veterum: peragenda peractis
Succedant, meliora bonis, majora minutis.
Auspiciis huc misse sacris (Sanctissime Præsul)
Sensibus hæc imis superum consulta repone,
Quæ Tibi fatidico dispandit carmine Vates,
Læta ruinoso proclamans omnia Templo.
Quo decet hanc speciem, vultu, sine nube, sereno
Fecundam laudum segetem sine fine Tuarum.
Molliter ossa cubent Offæ, ac Elphegi, Oliveri,
Rodberti, ac Birdi: merito celebrentur honore.
Debita Bellotto reddatur palma benigno.
Perpius extento Bellottus floreat ævo.
Non equidem invideo, lætor mage: gratulor illi.
Quod si tam celebrem mereatur guttula laudem,
Præmia quæ referet, largos qui funditat imbres?
Tantum at honorifico cedes, Bellotte, Jacobo,
Effuso tenuis quantum imbri guttula cedit.
Bellotti guttis rorata Capella virescit;
Imbribus assiduis divi madefacta Jacobi,
Integra quam lætos diffundent Templa racemos?
Nec tamen hæc aqueo, vitis cupit, imbre rigari:
Aureolo hanc Danaë Saturabis, Jupiter, imbre.
Hinc quæ spreta diu languenti Ecclesia morbo
Intabuit; vitam, Te, Te medicante, resumit,
Ut redit infuso flaccescens Vena Lyæo.

Hujus

Hujus sint alii fautores, sidera, sani:
Cinthia Bellottus: solus Tu φοῖβος Apollo.
Hæc Tu vivifico reparabis membra calore:
Hæc Tu magnifico decorabis Tecta nitore.
Aspice surgenti lætentur ut omnia Templo?
Grandævum videor mihi prospectare Jacobum,
Aspectus Virtute Tui, torpore solutum,
Atq; reornato scandentem climace Cœlos.
Ut renovat vires? ut concipit æthera mente?
Insuper alatos, ultro citroq; meantes
Cœlicolas video, bona climacteribus istis
Nuncia portantes Superis: ac gaudia divûm
Inde renarrantes terris de Præsule tanto,
Teq; cohortantes; (propria sat sponte citatum)
Euge: opus hoc miræ pietatis perfice Præsul!
Te nempe ad decus hoc peperit Natura, replevit
Dotibus eximiis Deus: Ars perfecta polivit:
In gremio refovet ter magni gratia regis:
Ditavitq; * bonis, tanta ad molimina, natis.
Hùc opulenta Tibi sua fundit viscera Tellus,
Hùc Tua Te Virtus, sorte ancillante, propellit.
Euge, opus hoc miræ pietatis perfice Præsul!
Aggredere æternos (servit Tibi tempus) honores.
His petitur Cœlum scalis, hac itur ad astra.
Nec mora: fervet opus. Structor, Lapicida, peritus
Gypsator, Sculptor, Fusor, Vitrarius: omnes
Artifices instant ardenter. Mœnia surgunt,
Dissita quæ fuerant loca concamerantur Erismis;
Extima plumboso velantur tegmine, pulchris
Intima cælantur laquearibus: omnia miris
Sunt decorata modis: respondent omnia votis.
Nec deerunt Mystæ, celebrent qui sacra, frequentes:
Sed numerosa brevi totam quæ compleat ædem
Pompa Sacerdotum, Psalmodorumq;, decano
Præducente chorum, cantabit grata Jehovæ
Cantica, tantorum fonti, authoriq; bonorum.

Hæc

* Plumbi fodinæ in agro Mendipensi.

Hæc mibi præsagit mens non ignara futuri.
Corpore (quis neget hoc?) specioso hæc Templa Ja-
Donavit Præsul, (pia na mdecreta proborum (cobus
Æquivalent factis) animum Rex ipse Jacobus
(Hoc quoq; quis dubitat?) tribuet. Deus alme Jacobi
Decretis benedic factisq; utrinsq; Jacobi.
O fortunatam nimium bona si Tua nôris
Thermopolim, tali frueris quæ Præsule, Rege!
Funde Deo summas ex imo pectore grates,
Et cole perpetuò pietatis honore Jacobos.
Quo pede cæpisti, Præsul Sanctissime, pergas.

Episcopi Responsio.

Cupivi diu, has ruinas, & hæc rudera videre & contemplari; has vero ruinas & hæc rudera videre, & contemplari, jam dolet: Ingrediar tamen, sed hoc animo, ut nunquam, hoc more, sim reingressurus, priusquam isthæc melius tecta videro.

The Translation.

AN

HISTORICO-POETICAL ACCOUNT

Of the various state of the Church of St. Peter *and* Paul *in* Bathe, *from its first foundation, in the Year* 775, *to this present Year* 1609.

ALSO,

A PROPHESIE of the happy Restauration of the same Church.

WElcome, Right Reverend, to this place,
Invited both by Heart and Face;
Enter; but first let me relate
This ruin'd Churches former fate.
If ancient Monuments you turn over,
An. 775. King *Offa* first you will discover
To found a Temple in this Place,
1010. Arch-Bishop *Elphege* next his Grace;
The third (when *Danish* rage and fire
To ruine both these did conspire)
1088. With greater cost *John* clep'd *de Villa*,
A French man born, but, silly fellow,
* *Usu, non Literis, Medicus probatur.* * Profest the Art, if stories true.
The Grounds of which he never knew.
This man at *Wells* did take a pett,
G. Malm. And many years did Bishop sitt;

But

But once in rage remov'd his See,
And caus'd it here in *Bathe* to be:
Five hundred Mark the City coſt
The Biſhop from the King, at moſt.
Where he a neater Pile did raiſe,
Which did not long proclaim his praiſe;
For God not pleas'd with him that quackt,
Made Sacrifice his Pious act.
Brave *Normandy* a Fourth ſent,
Monk *Robert*, who with good Intent
This ruin'd Fabrick did repair,
Compos'd the ſtrife about the Chair;
Caus'd his Succeſſors, ſtory tells,
To bear the Name of *Bathe* and *Wells*.
At length, when Benefactors ſtore
Had grac'd this Church where we adore,
The Three and twentieth Biſhop came,
Who minded by his Lucky name,
Oliver King, could do no leſs An. 1137.
Than King and Olive both expreſs.
Like Olive, peace and plenty great,
Were products of this Biſhops Seat;
But, to ſay Truth, in this grand thing,
He did reſemble more a King:
Roberts attempt away he took,
And rais'd this Chuch on which you look;
Strong Walls, fine Buttreſſes, the Roof,
With ſtately Pillars bearing proof:
Made Walks and Iſles both long and fair:
In ſhort, this handſom Pile did rear;
And doubtleſs it was his Intent,
(But ſudden death did him prevent)
To have endow'd this Church with Lands,
(He muſt obey, when God Commands.)
So great a task it was, I wis,
To build ſo fine a Church as this!

Now left the Work at ſtay ſhould ſtand,
Good Prior † *Bird* put his laſt hand,
He finiſht, with his coſt, the Thing,
And found ſome work after a King.

† William Bird, *the laſt Prior of* Bathe.

In the South ſide of the Chappel, outward, is a Memorial of his Name, a W. *and a* Bird *in Stone, with his Coat of Arms in the Chappel built by himſelf, and called, after him,* Bird's Chappel. *He was not buried here, but died very poor, having been blind for ſome time, and given much to Chymiſtry, while Prior here.* See Mr. *Aſhm.* Theatr. Chym. *Brit.* p. 475, in Annot.

But, Oh the fate of what is holy!
And, Oh the mad Religious folly!
Nothing that Sacred is muſt hold,
And men with Temples muſt make bold;
Abbeys are ruin'd, Churches ſackt,
Roofs ſold, and Rents are more than rackt;
Deluge of Sacriledge! what not?
Have Zealots thus their God forgot?
This innocent Chryſom's boxt about,
And torn in its Swadling-clout:
The Fabrick's ſpoil'd, they ſell the Stones,
Glaſs, Lead, Bells, all except theſe Bones;
Of this great Spoil, what was the cauſe?
Was't love of Mony, or God's Laws?
'Tis that hath ruin'd Church and Prieſt,
And laid our greateſt Heads to reſt.
'Tis that extinguiſht, and keeps out
The Lights, that erſt ſhone all about.
None ſeek the Churches good, but all
What they ſteal from it, their own call;
Hence in the darkeſt blackeſt night,
Hath lodg'd the Cities greateſt light.
But our good God, who loves his own,
This pitchy ſtorm away hath blown,
And with his heavenly Lamp diſpell'd,
The Chains of darkneſs which us held,

So

So that we now beholding are
To them for light they to us ſpare;
Yet ſo as each hath light enough
To give due praiſe without a ſnuff,
To whom deſerts ſhall gain a Name,
And ſpread or'e all the World a fame.
So far hath *Bellot*'s Star outſhin'd
Whoever hath to Church been kind,
As doth full-Moon, in Starry night,
Exceed the leſſer Torches light.
The Chappel ornaments, the Floor,
The Benches, Windows, Seats and Door,
Call *Bellot* Father; and the Bell
Rings *Bellot*, though it ring a Knell.
Hoſpitals, Baths, Streets and High-waies,
Sound out the Noble *Bellot*'s praiſe,
'Cauſe he was Pious, and hath given
Much, whoſe Reward ſhall be in heaven.

Thomas Bellot *Eſq; one of the Executors of* W. *Lord* Burghly, *ſometime Lord Treaſurer of* England.

THE PROPHESIE.

Forbear my Muſe; change now thy Text,
Come to things greater, better next.
Enough of old things: now ſucceeds
A good ſupply to former Deeds.
Thou, Reverend Prelate, ſent to us
By God Almighty's *Mittimus*,
Conſider deeply what he ſaies
To thee, through my Prophetick bays,
Wiſhing this Church no other ill,
Than to be built, and flouriſh ſtill.
View with clear aſpect from the top,
Your endleſs Praiſes fruitful crop.
Let *Offa*, *Elphege*, *Oliver*, reſt
Robert and *Bird* in Honours neſt.

Let bounteous *Bellot* take the Palm,
And after Age his Name embalm,
I envy not, but more rejoyce,
And give him too my thankful Voice.
If to a drop this Laud be due,
What's to a greater ſtock, think you?
He well deſerves a grateful ſenſe
That ſhowrs down Benevolence.
Bellot alone to *James* gives way,
Diff'ring as drop and ſhowr may.
Bellot's drops make the Chappel thrive,
When *James* divine long ſhowrs ſhall give,
How'll all the Fabrick ſprouting live?
This Vine loves not a Watery ſhow'r;
Gold into *Danâe* Jove will pour,
So that this Church that long hath been
Conſumptive, by thy skill agen
Gets ſtrength, as the flagg'd vein plumps up
And ſwells, with *Baechus* cheerful cup.
Others this Church may ſomewhat ſteed,
Bellot's the Moon, You Sun indeed:
With lively rays theſe limbs reſtore,
Thy Roof you'll nobly cover o're.

Behold! how all things now are glad,
Old *Jacob* wakes, and as a Lad
Enliven'd by Your preſence here,
Aſcends the Ladder quick and clear;
Look how he mounts, ſtriving to riſe.
And makes with vigour to the skies?
Methinks, I ſee the Winged hoſt
Of their new Meſſage ſeem to boaſt,
Telling the news above, and then
Returning with Gods Joy to men:
And quickning you, though quick before,
Compleat this work we You implore.

Na-

Nature hath bred you for this end;
To this God's great endowments tend.
Art you hath wrought, the King embraces,
Who seldom doth misplace his Graces.
And you hath aptly given a * Mine,
Prepared for this great design:
The Earth her bowels op's to you,
And your good Nature prompts you too.
Finish the work, Time serves, *My Lord*,
Which will eternal praise afford.
This way you will to Heaven climbe,
And to the Stars your self sublime.
Prest, The work advances, all
The Labouring men are come at call;
Builder, Stone-cutter, Plaisterer,
Graver, Bell-founder, Glazier,
All busie. Walls are up; The space
That common was, Arches embrace.
The outside's leaded, Roof adorn'd,
And all things to my wish perform'd.
Nor will there wanting be a Quire,
Which to this place may all retire,
And with resort, and their own Train
Fill this whole Temple once again.
Priests in their habits, Singers, and
A Dean the Quire to command:
Will Anthems sing to God above,
And praise the Fountain head, his love.
My mind perswades me this will be,
And I can at some distance see.
The Prelate *James* (none can deny)
Hath given a Body large and high,
(For those things that good men decree
Are equal with their deeds to me)
A Soul King *James* (who can this doubt?)
Will add, to make this compound out.

* *The Lead Mines of* Mendip.

Now *Jacob*'s God bleſs *James*'s twain,
Their Actions and Intents maintain!
O happy *Bathe*, if thou didſt know
From whence thy happineſs doth flow!
A King and Biſhop now thou haſt,
Ne'r yet outdone in Ages paſt;
Give Thanks to God with all thy heart,
And Honour to both *James* impart.
Proceed, Moſt Worthy Prelate, in
The Thing you did ſo well begin.

The Biſhop's Anſwer.

I have long deſired to ſee and contemplate theſe Ruines and Rubbiſh; and now it grieves me to behold Them: However, I will enter, but with this intent, never to re-enter till I ſee them better cover'd.

For a fuller confirmation of the precedent particulars, I think fit to inſert in this place an extract out of an ancient Record, now in the houſe of my Honoured friend *Edward Coſin* Eſquire, whoſe genius inclining him to the ſtudy of Antiquity, hath collected, and communicated it to me.

Johannes de Villula, the 16*th*. Biſhop of *Wells*, having bought the Town of *Bathe* of King *Henry* the Firſt for five hundred Marks, transferred his Seat unto that City, 1088. Hence grew a jar between the Monks of *Bathe* and Canons of *Wells*, about the Election of the Biſhop. At laſt the difference was compoſed by that Biſhop *Robert* whom before I ſpake of: *That* from thence forward the Biſhop ſhould be nominated from both places, and that precedency in the ſtyle ſhould be given to *Bathe*. *That* in the Vacancy of the See, a great number of Dele-

Delegates from both Churches ſhould elect their Prelate, who being elected ſhould be inſtalled in them both: *both* of them to be reckon'd as the Biſhops Chapter, and the Grants and Patents confirmed in both. And ſo it ſtood until the reign of King *Henry* the Eighth; what time the Monaſtery of *Bathe* being diſſolved, there paſſed an Act of Parliament for the Dean and Chapter of *Wells*, to make one ſole Chapter for the Biſhop, A. 35. H. 8. c. 15. *Thus far Mr. Coſin.*

The Church that now is, was firſt begun *A. D.* 1137. by *Oliver King* Doctor of Laws, of Kings Colledge in *Cambridge*, Principal Secretary to three Monarchs of this Land, *Edward* the fourth, *Edward* the fifth, and *Henry* the ſeventh; Regiſter of the Knights of the Garter, Biſhop of *Exeter*, and thence tranſlated hither *Novemb.* 6. 1495. died 24*th.* of *Jan.* 1503, and is thought to lie buried at *Windſor*, where he was ſometime Canon. It was four hundred ſeventy five years before it was compleated and brought to perfection (having made many halts by the way) and was finiſht about the middle of King *James*'s Reign, near. *A. D.* 1612, as by the Munificence of Noblemen, Knights, Gentlemen and others, ſo eſpecially by the liberal hand of the Learned Dr. *James Mountague* Biſhop of this Dioceſs, to whom the former Poem was directed, who at one time gave a thouſand pounds towards its Reparation, and lies buried, by his own appointment under a fair Marble Monument, in the body of the Church, deceaſed *July* 20. 1618, with this elegant Epitaph on the South-ſide:

MEMORIÆ

MEMORIÆ SACRUM
PIETATE VIRTUTE ET DOCTRINA INSIGNIS *JACOBUS MONTACUTUS* EDVARDI MONTACUTI DE BOUGHTON IN COMITATU NORTHAMTONIÆ EQUITIS AURATI A SAR. COMITIBUS DEDUCTA PROPAGINE FILIUS QUINTOGENITUS A SAPIENTISSIMO *JACOBO* REGE SACELLO REGIO DECANUS PRÆPOSITUS AD EPISCOPATUM BATHONIENSEM PROMOTUS ET DEINDE AD WINTONIENSEM OB SPECTATAM IN MAXIMIS NEGOTIIS FIDEM DEXTERITATEM ET PRUDENTIAM IN SANCTIUS CONCILIUM ADSCITUS REGIQUE CUI CHARISSIMUS ERAT IN AULA ASSIDUUS IN MEDIO ACTUOSÆ VITÆ CURSU QUAM DEO ECCLESIÆ ET PATRIÆ DEVOVERAT AD ÆTERNAM VITAM EVOCATUS 20. JULII ANNO DOMINI 1618. ÆTATIS 50.

Sacred to Memory.
For Piety, Vertue and Learning, very eminent, James Montague, *fifth Son of Sr.* Edward Montague, *of* Boughton, *in the County of* Northampton, *Knight, lineally descended from the Earls of* Salisbury, *by the most wise King* James *made Dean of the Chappel, then Bishop of* Bathe, *afterwards Bishop of* Winchester, *and for his faithfulness, dexterity and prudence in weighty affairs, chosen one of the Privy Councel, and*

and very much at Court, being in great favour with the King: In the midſt of a buſie life, which he had devoted to God, the Church, and Country, was ſummoned to life everlaſting, 20 July 1618, in the 50th. year of his age.

On the North ſide, this Inſcription.

REVERENDISSIMUS HIC EPISCOPUS IN HOC TEMPLO ANTIQUISSIMO QUOD INTER ALIA MULTA EGREGIA PIETATIS MONUMENTA MAXIMIS IMPENSIS INSTAURAVIT CORPUS DEPONI JUSSIT DONEC CHRISTO REDEMPTORI VIDEBITUR EUM CUM JUSTIS AD INTERMINATAM VITAM QUAM IN TERRIS SEMPER ANHELAVIT EXCITARE *EDVARDUS MONTACUTUS* DE BOUGHTON *HENRICUS MONTACUTUS* CAPITALIS IN BANCO REGIO JUSTITIARIUS *CAROLUS MONTACUTUS* TESTAMENTI CURATOR ET *SIDNEIUS MONTACUTUS* A SUPPLICUM LIBELLIS EQUITES AURATI FRATRI OPTIME MERITO CUM LACHRIMIS POSUERUNT.

In this moſt Ancient Church, which, among many other Monuments of Piety, with great charge, he repaired; This moſt Reverend Biſhop commanded his Body to be laid, until Chriſt the Redeemer ſhall pleaſe to raiſe him, with the Juſt, to life eternal, which, when on Earth, he earneſtly deſired.

Sir

Sir Edward Mountague *of* Boughton, *Sir* Henry Mountague *Lord Chief Juſtice of the Kings Bench*, *Sir* Charles Mountague *his Executor, and Sir* Sidney Mountague *Maſter of the Requeſts, Knights, to their moſt deſerving Brother, in much ſorrow, erected this Monument.*

Br. View, &c. p. 101, 102, 103.

Concerning *Oliver King*, the founder of this Church, Sr. *John Harington* tells this pretty ſtory: That lying at *Bathe*, and muſing or meditating one night late, after his Devotions and Prayers for the proſperity of *Henry* the Seventh and his Children (who were then all or moſt part living) to which King he was Principal Secretary, and by him preferred to this Biſhoprick; he ſaw, or ſuppoſed he ſaw a Viſion of the holy Trinity, with Angels aſcending and deſcending by a Ladder, near to which there was a fair Olive Tree ſupporting a Crown, and a voice ſaid, *Let an* Olive *eſtabliſh the Crown, and let a* King *reſtore the Church.* Of this Dream or Viſion he took exceeding great comfort, and told it divers of his friends, applying it to the King his Maſter in part, and ſome part to himſelf. To his Maſter, becauſe the *Olive* being the Emblem or Hieroglyphick of *Peace* and *Plenty* ſeemed to him to allude to King *Henry* the Seventh, who was worthily counted the wiſeſt and moſt peaceable King in all Europe of that age. To himſelf (for the wiſeſt will flatter themſelves ſometimes) becauſe he was not only a chief Counſellour to this King, and had been his Ambaſſadour to conclude a moſt Honourable Peace with *Charles* the Eighth, who paid, as *Holinſhead* writeth, 745 Duckets, beſides a yearly Tribute of 25000 Crowns, but alſo he carried both the *Olive* and *King* in his Name; and therefore thought he was ſpecially deſigned for

this

this Church-work, to the advancement of which, he had an extraordinary inclination. Thus though (as St. *Thomas* of *Aquin* well noteth) all Dreams, be they never so sensible, will be found to halt in some part of their coherence: yet most certain it is, for the time, he was so transported with his Dream, that he presently set in hand with this Church, and at the West end thereof he caused a Representation to be graved of this Vision of the Trinity, the Angels and the Ladder; and on the North side the Olive and Crown, with certain *French* words (which I could not read) but in *English* is this verse taken out of the book of *Judges*, chap. 9.

Trees going to chese their King,
Said, be to us the Olive King.

All which is so curiously cut and carved, as in the West part of *England* is no better work, than in the West end of this poor Church. And to make the credit of all this more authentick, he added this word to it, *De sursum est*, *It is from on high.* Thus much the Stones and Walls (though dumb witnesses, yet credible) do plainly testifie.

Thus far that Learned Knight, and Great Well-wisher to this Church; where it may be noted, that the Olive and Crown are on both sides of the Church, North and South, with an Elephant on each side of the Olive crown'd; and the words Sr. *John* saies he could not read, are not French, but Latin, being the old Translation of the English writ on both Pillars, of either side, in good Text hand, though now not so legible, above the English in this manner:

Ierunt

Ierunt ligna ut ungerent super se Regem,
Dixerunt que Olive Impera nobis.
Trees going to chese their King,
Said, Be to us the *Oliver King.*

Which gave occasion to some in the late Times to take it for a Propheſie, but was intended nothing more than to preserve the Memory of the Bishop that was Founder.

CHAP. XII.

Of the Baths of Bathe.

CConcerning the Nature, Use and Virtues of the Baths, I purpose, if God permit, to write a large and particular Account, in a Just Treatise on that Subject, consonant to my own Principles, which for the greater Credit of this Nation and Place (nothing having ever been before attempted in this kind) shall be in the general Language; the design of which I have expressed *Chap.* 7. For I well remember what I writ in my Appendix, seven years ago, in these words: *I come now to speak something of the Nature, Use and Virtues of the Baths. And here it cannot be expected I should say much, because my Experience of them as yet hath been but little, and the Observations I have made seem fitter, as they are intended, for a foundation to a greater Work, which Time and Variety of Experiments must compleat, than at present to be Communicated to the Publick. And to make some compensation for my Brevity in this Thing,*

Thing, which is justly deemed the most material of all other, I shall take the boldness to engage, as soon as Time and Opportunity shall permit, to make a through search into the Cause of the Heat, Nature, and Efficacious Operations of the Baths, and perhaps give a more satisfactory Account of the former, than hath yet been given by any; and for the latter, I shall not build on the Hay and Stubble of the Talk and Relations of persons hyast and concern'd, but on the solid basis of Reason, Observation, and Experience. And again, the last words: *But I hope I may be excused on the score of my former Engagement, if I am not more particular at this time in things of this nature, till a just amassment of Observations and Experiments, and a rational deduction of Conclusions from them, which I hope in some time to accomplish, shall either confirm me in the opinion I now have of the Nature and Virtues of the Baths of* Bathe, *or supply me with a better.*

Having, I say, intended a Piece of this nature, and also published many Particulars relating to this Affair, in the ensuing Century of Observations, which I now make publick, as a Specimen of my way of procedure, and ground-work or foundation of my next Superstructure, I shall content my self at present with some few Remarks.

The Baths then in some *Things* do agree; in others are different.

They agree in this, That though chiefly three in number, the King's, Cross, and Hot (the Queen's being but an Appendent to the King's, as the Leper's to the Hot) yet they all participate of the same Minerals, only the Hot Bath, if some of my Observations hold, hath something more than the King's, or Cross, both which as to the particulars, and particular proportions, in a Hogshead, Gallon,

and

and Pint, are much the ſame, and what is defective in one Ingredient in one Bath, is made up by another, in the other. So that herein the wonderful Contrivance of the Almighty hath appeared, in making ſo fine a Compoſition of ſuch various Ingredients, and acted (with Reverence be it ſpoken) not only the Phyſician, but the Apothecary too, a good example and precedent for his Creatures to follow, who have liv'd to ſee that unhappy day, wherein a blear-ey'd *Leah* hath been advanc'd, though with ſhame and deſtruction too, above a legitimate *Rachel*.

They differ chiefly in Dimenſion, and degree of Heat.

In Dimenſion; The King's Bath being 57 foot, or 19 yards, 10 inches, long; 40 foot, 8 inches, or 13 yards $\frac{1}{3}$ and 2 inches in breadth.

The Queen's, 8 yards, or 24 foot, 2 inches, in breadth; in length 25 foot, 4 inches; or 8 yards, 16 inches.

The Croſs Bath, 24 foot; or 8 yards, 6 inches long; 19 foot 11 inches, or 6 yards; and 5 inches over Northward; 12 foot, or 4 yards, 7 inches over on the South.

The Hot Bath, 10 yards 8 inches $\frac{1}{2}$ long; 4 yards 13 inches $\frac{1}{2}$ broad South; 4 yards $\frac{1}{2}$ and 5 inches over North.

From this undeniably is deduc'd that they differ in the Water they contain; for being of different dimenſions, the greater muſt hold more, and the leſſer leſs. To purſue this Curioſity a little further, I find by Gage, The King's Bath being 1 yard 18 inches in Water, to contain three hundred and fourteen Tun, thirty ſix Gallons.

The Queen's, eighty one Tun, three Hogſheads, and eleven Gallons.

The

The Cross, fifty three Tun, and forty seven Gallons.

The Hot, fifty four Tun, and twenty seven Gallons.

As to the difference arising from the degree of Heat, though I must acknowledg my defect of Observations in that kind, which I will hereafter supply, yet I may say thus much now, That the King's and Hot Baths are not more different in that particular than the Queen's, and Cross, and that this latter is the most temperate of all.

And here it may be noted, That what is written concerning the difference in degree of Heat in the Baths, is so to be understood as esteemed now; for the Hot Bath was formerly accounted the Hottest of all, whence it had its name, Κατ' ἐξοχὴν, the rest being ever, and so reputed Hot, though in some degrees inferior to that. Hence *Jones* says, From what he there deliver'd, the reason may be gather'd why some of the Waters of Baths break out most Hot, as the Hot Bath at *Bathe*; others meanly Hot, as the Cross Bath; others between both, as the King's Bath. And in another place; The King's Bath is Hot between both the other. But of this I intend, God willing, to make further Tryals.

The Cause of this Variation I conceive to be not an Intention, and Remission of a Subterranean Fire, (which meeting with an Enemy that hath had so many recruits and reinforcements as the Water hath, and will have till the end of all Things, 'tis much should yet keep its ground, and not be extinct, to mention no other Absurdities at present, that undeniably follow on that *Hypothesis*, this Variation, I conceive, doth not arise on that score) but rather is caused by a greater or lesser fermentation, arising

from the Acting of an Acid on an Alcalizate Salt, both which are contained in the Bath, and much assisted by the vast Quantity of an impalpable Powder, the greatest Ingredient in the Waters, and seems to serve for no other end, except, what shall be hereafter mentioned, to administer a perpetual supply to the Fermentation.

'Tis likewise observable, That where the greatest Heat is, as in the King's, and Hot Bath, there is the greatest Quantity of this fermentative matter, insomuch as I have Calculated that near 50 pound weight goes off in little more than 24 hours in the King's; but in the Cross Bath, where less need is, there is less of this gritty matter, and much less goes off in a longer time. So that having sometime resembled this Fermentation to Generation, the father of it being an acid saline Spirit, and the mother this gritty matter and Alcalizate Salt, the Conjunction made, and the Thing produc'd, the father slips away invisibly in a Mist of Steam, and the mother passes out at a back-door as soon as may be, resigning the Work to be successively promoted in the same manner, to future generations. And indeed should the matter still continue that bath done its work, the Springs and Channels would be quickly obstructed, so that what is acid being of light burden, and more active, quickly exhales, and the more Corpulent passeth off by convenient Sluces and Draughts, as an Excrement, upon which the Wheel of Fermentation is kept continually going, by an immediate succession of new matter of the same kind. That not only the acid part, but the more fixt Salts also do in part exhale, may be found confirmed by the 88th. Observation, which cannot but part with something of their Substance in the *Lutis* of Fermentation.

Again;

Again, In some places where the fermentation is less, as in the Water of St. *Vincent's Rock* near *Bristol*, which hath not half the heat that the Cross-Bath hath, the Water abates near the proportion in the quantity of Ingredients; and although for the most part the same, yet in so small a proportion, cannot act as a greater quantity would do, and the acidity being so little as scarce to coagulate Milk, or turn with Galls, may not be expected to do wonders in a fermentation.

To conceive a continuation of the Hot waters of *Bathe* to that of *Bristol*, by way of Drein, as some Ingenious persons have imagin'd, is unphilosophical. For if very Salt water becomes insipid by running but the tenth part of that course under ground, how can it rationally be expected that any Salt should be left of that little in the Bath here, after such a tedious journey, in which it may happily meet with many fresh Subterranean passengers in cross roads, that may intrude upon it, and, by mixing with it rob it long before both of its Saltness and Heat.

I must therefore say here, what I shall further discourse of more at large in another place, That since my first consideration of this matter, I was ever inclin'd to believe, that the cause of the Heat and impregnation of the Baths was not far off from the Baths themselves, (*Coram adest quod quærimus*) for to me it seems not a little strange, that on digging so many Wells, Stone-quarries, Cole-pits, and other penetrations of the Earth to a considerable depth, that have been made about the City, no Hot water should appear, but only in one Stone-quarry near *Dunkerton* about an hundred years ago, mentioned by *Jones* to have been so hot, that they were fain to forbear working. The truth of which *Bathes Aid*, lib. 2. fol. 20.

Relation I ſomewhat queſtion, and rather believe the honeſt *Cambrobritan*, being a Stranger here, might the eaſier be impoſed on by ſome fabulous Relator.

Another Argument for a different Fermentation I take to be the different forms of ſhooting of the Nitrous ſtiria's; otherwiſe, why ſhould the Kings and Hot-Bath, that have the ſtrongeſt heat, ſhoot into more compact needles, and much thicker than the Croſs? but that the ſtronger fermentation ripens, and invigorates better the Crude matter of the ſhoots, when the other not ſo ſtrong leaves the matter crude and weak.

Before I give a rough Draught of my own Hypotheſis, which I only here propoſe, and ſhall further, God willing, illuſtrate and poliſh in my next undertaking, I muſt premiſe theſe few particulars, which in part contain a Survey of this Country.

Firſt, That the ground on which the City of *Bathe* in good part ſtands, eſpecially near the Baths, is raiſed ground, and that probably, under ſome yards of Gravel is a Bog, made by the confluence of Waters hither. This ſeems in good meaſure evident from this, That on the digging ſome foundations not long ſince, the Workmen came at laſt to a ſoft Mud, which yielding much, and a Souldiers Pike of a good length thruſt into it, no bottom was diſcovered, but a warm, Marly, Sulphurous mud adhering to the Pike. This was obſerv'd in the North and South-weſt parts of the Town.

Secondly, That the Springs of Cold water about this place are very numerous, inſomuch that ſometime ſince, having been deſired by that Ingenious and Learned Knight Sr. *Anthony Morgan*, ſince dead

dead in *France*, to ſearch what Springs I could find hereabouts, in order to the making ſeveral mixtures, if that way we might give any light to a Fermentation; I remember I brought Water from twenty two ſeveral Springs, and might have done from as many more, within two miles compaſs, on one ſide.

Thirdly, That the two Water-houſes ſupplying the City, are placed on two Hills, one on the North, and another on the South, for the more convenient ſupply of the whole with Water.

Fourthly, That the Bowels of the Earth on the South of the Town, with the South-eaſt and South-weſt parts, for four or five miles compaſs, are ſufficiently repleniſht with great plenty of Free-ſtone, which ſupplies the Country round about with good Materials for building, and would do many Counties more were there a way agreed upon for its better conveyance.

Fifthly, That on the North part of the Town little or none of this Freeſtone is digged, but Water ariſes in abundance, and on the Hills about *Marſhfield* ſome Marcaſites have been found, of which Vitriol is made, and probably more of that kind are contained in that ground. I mean not the white Marcaſite found on *Lanſdown*: what that was is notoriouſly known.

Sixthly, That another ſort of Earth that abounds about *Bathe*, is blew Marle and Ochre. This is diſcovered almoſt in all ſides of deep hollow ways, the River ſides, and particularly at *Lambridge*, a mile off, is a blew Marly ſlate with Ochre ſticking to it, and under that clear Ochre alone. And

Seventhly, That almoſt all things about the Bath, as Marle, Ochre, Freeſtone, Sand, Mud, Scum, Shells and Salts, will ferment on the affuſion of any acid.

These things premised, I proceed to my Conjecture concerning the Rise, Continuation and Heat of the Baths; and man can do no more; for *Μάντις ἄριστος ὅστις εἰκάζει καλῶς, the best Prophesie is but a good Guess.*

I conceive then, that the Salts and Marle with the conflux of Waters into this compass of lower ground, being created in the beginning, and then placed under or near where the Baths now stand, by the virtue of those words, פְּרוּ וּרְבוּ, *increase* and *multiply*, have increased ever since from their own seeds, in their proper Seminaries, as the greatest part of the Creation doth and ever will, till the consummation of all things. Neither do I see much more reason to admire the breeding and increase of those Minerals under ground, than the perpetual springing and inexhaustible growth of the little spires of Grass we tread on above it: But it ever was and will be the humor of the generality of Mankind to overlook what's before them, and pay their admiration to what they do not see, it faring with many other things as with Vertue in the Poet:

——*Præsentem odimus*
Sublatam ex oculis quærimus invidi.
Vertue remov'd we dote on; present slight:
And darkness thus prefer before the light.

The Salts being here sufficiently fixt, two large Currents of Water may come down upon them, and meet very near or under the Baths themselves; the one from the South, bringing with it its *Cargo* of Freestone, the commodity, as was said of that part of the Country; the other from the North, acuated by some Vitrioline Marcasites, over which it

it may pass, and meeting near the place with all this matter that is fermentative, a fermentation may arise sufficiently productive of what heat we find; considering especially the closeness of the Caverns of the Earth in which it is bred, where little air can abate it, but rather by that advantage, reduplicate the heat.

Much to this purpose are the words of that Ingenious and Learned Physician Dr. *Sherley*, whose Philosophical Essay came late to my hands, and some considerable time after I had framed, and in these words written, my own Hypothesis; yet in regard some coincidencies, though at this distance, and without any converse, have happen'd, which may confirm and illustrate what is before discourse, I shall, by his permission, crave leave to say, That if the words I now recite be understood of the Bath-waters, as he intended them of Water in general, the duration and equality of these Waters will be better understood, and found to be according as I have before asserted. He therefore saith in the beginning of the eighth Section of this Philosophical Essay, p. 112. *In the beginning God infused into the bosom of the Waters the Seeds of all those things that were afterwards to be made out of the Waters, setting them their constant rules and laws of acting, and by the power of the words,* Increase *and* Multiply, *they had a faculty given them to continue themselves in the same order till the World shall be destroyed by fire; at which time all Seminal beings shall desert their gross bodies, and return to their first fountain and grand Exemplar, GOD, on whom they have at this time a constant dependance.*

This I am apt to believe might be made demonstrative, if digging about the Baths might be

admitted and practic'd without prejudice to the Springs, which, 'tis feared, will enſue, and therefore I muſt be content with that kind of Demonſtration, which Art will afford in imitation of Nature, ſome of which I could now propoſe; but I will not prevent my ſelf in things of this nature, and therefore ſhall end this Subject for the preſent with theſe two Remarks:

First, That the Baths having the ſame Minerals, and but little differing in proportion neither, muſt be equally advantagious in the ſame diſtempers, but with this difference, that the different degrees of Heat altering ſomewhat the caſe, judgment muſt adviſe what Bath the Patient ſhall be committed to; how long it may be convenient to ſtay, and what government is to be uſed more in one Bath than another, beſides the determination of the Diſtemper 'tis proper to relieve.

And, Secondly, Whereas great diſcourſe hath ariſen here concerning the conveyance of ſome Nuts that were obſerved in the Ciſtern over the main Spring of the Kings Bath, upon the alteration of a firm ſtone croſs in the middle, to that pretty Wooden device that now ſtands there; ſome whereof were black and rotten, others freſh with their kernels in them, and ſome with ſhales very green about them: the way of paſſage may be conceived to have been by the currents of Cold water from an open Spring, if not the River, near a Coppice or Wood-ſide, with which the water of the Bath may in part be ſupply'd, the Bath being, as I ſuppoſe, the great Exchequer, into which the leſſer Rivulets do return their tribute, and to which they pay their homage, as to their Liege Lord and Soveraign, conſtituted ſuch by Him, by whom Kings reign, and from whom alone they receive their Scep-

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ters. That these Nuts could not come, by a nearer cut, from the Bath-side, is most evident from this, That the Cistern was so well plaister'd about with Plaister of equal hardness with a stone, that it cost very many blows to get it up; presently from the rise of which the Nuts did appear, immediately shot up from the Springs themselves.

As to the Internal use of the Waters, so much of late applauded, and not without cause; as a grave Physician, sometime of this Place, hath in his Writings condemned that, the Reason of which he never understood; so would not I on the contrary, give my Vote for that which I had not throughly examin'd, and on good grounds judged and found advantagious. *Dr. Venner Tr. of Bathe, p. 12.*

It being therefore clear, that Vitrioline, Nitrous, and Saline springs, are recommended by the most Intelligent Writers to be used as a drink; and the forementioned Salts, the two latter fixt and visible to the eye, the former more invisible, transient and halituous, being contained in the Waters, I may conclude them by good consequence to be potable and most proper to be drank. Neither is the heat offensive, but amicable to the stomach, and doth not of it self, unless ingurgitation procure it, incline to Vomit. But because the drinking of the Waters hath so much obtain'd, I have the more particularly discours'd of that in the two following Chapters.

CHAP. XIII.

Of the Use of the Bath-Water in Potion.

HAving in the close of the former Chapter debated and determin'd in short the Question, Whether the Bath-water may be safely used inwardly, and on good grounds carried it in the Affirmative: The next Thing I am to proceed to, is, The manner how, and what course is to be taken by those that would use it so as to find benefit thereby. But before I treat of this, I shall enervate one grand Objection, and then give some preparatory directions for the better information, and greater benefit of the Patient.

An OBJECTION.

It may then be said; That the Bath-Water, according to present discoveries, containing those Ingredients that may be prejudicial to the Body, the use of them in potion may not seem to be safe, and the best way to decry the internal use, is to Anatomize their body, and declare their Contents; some of which being gritty, and of a Lapideous nature, may obstruct the mesentery, milky veins, and other passages, and conduce much to the heaping up a fabulous matter in the Body, and thereby give occasion to the intolerable excruciations of the Stone and Gout, besides the foundation it may lay for other distempers; others being of a relaxing and effeminating nature, may have no good effect and influence upon the Nervous parts, especially the Stomach and intestines,

inteſtines, through which they paſs; and therefore this uſe of the Waters ſeems rather to be avoided, and the inconveniences ariſing in probability from ſome parts *non*-ſaline, may be thought much to overbear the advantages expected from the Salts.

The ANSWER.

To this, I think the Subſtance of all that can be objected, I return this Anſwer;

That the ſuppoſed Culpable parts in and about the Contents of the Bath-water, being only three, Grit, Bitumen and Sulphur, the former, though in the greateſt proportion, is ſo finely wrought and intimately mixed with the Body of the Waters, that in truth it cannot deſerve that name, and therefore I call it ſo in relation to the more brown and gritty, appearing on Evaporation, as I have elſe- *Obſ.* 83. where obſerv'd; this then in the Waters that are drank being ſoft and impalpabable, and no magiſtery more finely pulveriz'd, muſt paſs in Conjunction with the Water through all its Meanders; neither is the ſtay uſually ſo long in the Body, as to occaſion any fear of a Separation, which probably may be if they paſs not well, and therein chiefly, I ſuppoſe, to lye the danger, the natural heat being not ſo violent, but of a more moderate and even tenour, and too weak to make an analyſis of the Water in ſo ſhort a time, or diſſolve its body, as the fire doth, but having diſcharged its office, is diſcharged alſo by the uſual ways of Evacuation, if the Water ſtay not in the Body too long.

Beſides, The benefit of this Inſipid magiſtery may not be a little; for if the acrimony of the blood be abated, and ſharp humours allay'd, mitigated

gated and dulcifi'd, as the Experience of many persons, the two Summers last past especially seem to testifie; I know nothing else in the Waters I can attribute this effect with greater justice to, than this impalpable powder, which like Coral and Pearls, being in themselves gritty and insipid, are known to produce the same effects without prejudice to the body, by imbibing the Acrimony, or altering the property of those humors they are found to allay. I confess indeed, some expectation might in reason be of a fermentation within, as by the means of this powder, in good part there probably hath been without in the Waters themselves, according to my Hypothesis mentioned in the former Chapter, if the Powder were separated and immediately mixed with acids in the Bowels, Stomach, Spleen, or elsewhere, upon which, Eructations, Inflations, and other inconveniences might ensue; but the Water passing quickly off, and there being not that constant supply as underground, nor proportionable acids neither, as may be there, no such ill effects can reasonably be fear'd, nor yet have been observ'd.

As to *Bitumen*, either Liquid or Solid, the first of which is chiefly condemned by Mineral Writers, no inconvenience can arise from that, in regard I do not conceive it mixed, or indeed capable of mixing with the body of the Waters, but is at some certain times eructed from the Springs, chiefly in the Months of *June*, *July* and *August*, it ascends, being driven through the Waters, without mixture, to the surface, and there remains as a Scum, which taken off and dried burns like Stone-pitch, and is noted elsewhere: So that the quantity being inconsiderable to any other of the Minerals, and the times of breeding and appearing not constant, with

See Obs. 100.

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an incapacity of mixing with the body of the Waters, otherwise certainly it would not ascend and float on the surface as we find it doth: these things, I say, considered, I cannot but think it strange, the Learned Dr. *Jorden* should assert these Baths to be Bituminous *à prædominio*, or consist principally of Bitumen, which I shall hereafter make appear to be but a less principal Principle, and rather an appurtenance to, than an Ingredient in the waters. So much also I must further say, That the swimming of a Bituminous substance on the surface of the waters; the shrivelling of the tops of the fingers in the Bath; and the bare smell of Sulphur by the Baths-side; are no masculine foundations for asserting those Principles, and making *that* the greatest ingredient in the waters, that is not capable of mixing with them.

Whereas *Sulphur* (the third Ingredient of Dr. *Jorden*, and least proportionable, affirming the Baths to consist principally of Bitumen, with Nitre and some Sulphur) is in much greater proportion than the Bitumen mentioned but now, and contains, I judge, near a fourth part of the courser Contents, the result of evaporation, for so much or therebouts is lost in Calcination, this, I say, though much in quantity, cannot relax or effeminate, either by fattiness or otherwise, as some Authors pretend; for, whatever it may have of that, 'tis certainly so much alter'd by the other Ingredients into whose bosom it is taken, and to which it is so nearly united, that nothing of that nature doth appear at any time, and is in nothing discovered more than its inflammability. We ought therefore here to expect the known vertues and benefits of Sulphur, to befriend the Lungs, to comfort and cherish weak parts, and do all those good offices we experience in

N.B. C. 16. p. 150.

in a Compoſition though made of many things beſides, rather than to imagine the Water of the Fountain *Salmacis*, to be continued hither, or be frighted with any *Sardanapalian* nature in Sulphur, which may create inconveniences we know not what. But if any perſon, notwithſtanding what hath been ſaid to the contrary, may be in ſome ſuſpicion of any nocument from the Sulphur, he may have a Salt made out of the Waters to be diſſolved in it, in which Sulphur is not concern'd, and ſo the Waters may be drank in leſſer proportion.

Salmacis, *fons Cariæ limpidiſſimus, juxta* Halicarnaſſium; *eo nomine olim malè audiens, quòd lavantium in eo, aut ex eo bibentium corpora effœminaret.* Stephanus.

Having therefore combated theſe three ſuppoſed Enemies to the Waters inward uſe, and found them weak and inſufficient to maintain the oppoſition they pretend to, the greater confirmation will accrue from the conſideration of the three-fold encouragement, ariſing from the mixture of the triple Salt, Nitre, Salt and Vitriol, the further enlargement on which I ſhall at preſent forbear, and now give ſome few directions for the Patient's benefit I mentioned before.

The firſt of which is, That 'tis very neceſſary the Body be well prepar'd before the Waters be taken, and conſequently that good advice be had whether it be proper or no, for the inconſiderate uſe of any thing muſt be very prejudicial; and the beſt reaſon why many Effects are not produc'd, is becauſe in reaſon they could not be expected. This preparation muſt be made, not ſlightly with a little Bath-water and Salt, Syrup of Roſes, and Manna, and ſuch like alimentary Medicines, but with proper, effectual, and frequent Purgations, as the knowing Phyſician will think requiſite ſometimes. For what Impurities are *in primis viis*, the Stomach, Inteſtines, *&c.* will certainly with the Current be carried further into the Body, defile the blood, and thereby

thereby create an Iliad of evils; whereas if the Body be well prepar'd, the Water hath besides a cleaner passage, a more free one too, unto the parts it must relieve.

'Tis also less beneficial for the Patient to drink the Water in the Bath, and contrary to the rules and directions of intelligent Physicians; but if thirst be troublesom, somewhat may be taken to allay that, and half an hour before rising a quantity may be drank, and the rest in bed, if occasion shall require; otherwise to set aside some time for drinking alone, and never, during that time, to use the Bath at all, is what may give both Uses due liberty to exert their operations, and not cramp or supplant one another, as they often do when made use of together.

It is likewise requisite that a good course of Diet be observed in the use of the Waters, both as to Meat and Drink; that dinner be of meats of light and easie digestion, at twelve or one a clock, when the Waters have made a considerable pass; and that supper be in good time, that the Body may be clear against the next morning again.

The best time for drinking is in the morning early, from the Pump, at the place it self, if it may be, otherwise, if near, at home, very warm, with a quarter of an hours walking after every Pint or Quart, at utmost; arising from three to six pints, four to eight, or five to ten, as the Body will bear, for no set gage can be given; and the best Rule is, that it ought to be taken *pro Tolerantia*, every one as they are able to bear, without ingurgitation, or reluctating again. The number of days, 7, 14, 21, or a month, after which time I have observ'd the like effects not to be produc'd, as in the intermediate space, and therefore none ought to use it longer at one season.

But

But these Things, and many more of this nature, shall be further discuss'd, and the whole Circuit of the way of drinking gon, and comprehended, in the Solution of the following Questions, which I shall only here propound.

Question I.

Whether the Bath-water ought to be drank Hot, or Cold?

Quest. II.

Whether in a great or little Quantity?

Quest. III.

Whether it may be drank at Meals?

Quest. IV.

Whether Bathing and Drinking may be done on the same day?

Quest. V.

Whether Drinking may be in the morning, and Bathing in the evening of the same day?

Quest. VI.

Whether the Bath-water ought to be taken many days together, or else some days to Bathe, and others to Drink?

Quest. VII.

Whether large Draughts may be taken, or more moderate; and what time is required should be between the Draughts?

Quest,

Queſt. VIII.

How many days it is convenient the Bath-water ſhould be drank?

Queſt. IX.

Whether any Medicines may be uſefully taken with the Waters, to further their operation?

Queſt. X.

What times of the year are moſt proper to Drink it in?

Queſt. XI.

Whether the Bath-water may be taken in Winter?

Queſt. XII.

Whether the Leap-year hath any malign Influence on drinking the Waters?

Queſt. XIII.

Whether the Waters may be ſafely uſed in the Dog-days?

Queſt. XIV.

Which is firſt to be done, either Bathing, or Drinking?

To give a greater ſecurity and Credit to the drinking theſe Waters, with which I ſhall conclude this Chapter, it may be noted, That, beſides the common Diſcourſe of things within the memory of

man, the Bath-water hath been order'd to be drank above an hundred years ago; for I find in a Physician that writ concerning them, *A.D.* 1572. among other things, these directions:

Jon. Bath. Aide. lib. 4. fol. 28.

About an hour after Sun-riſing in the morning, drink the Water out of the Spring; the Body afore purged, the digeſtion fulfilled, and the Bath firſt cleanſed, remaining clean ſix hours before.

So much of the Water as ſhall not be grievous to the Stomach may be drank.

The Water being drank, the Patient muſt walk gently a few paces in a temperate air.

By which it appears, how careful they were then of preparing the Body, and having the Water pure, which ought not to be leſs regarded now, otherwiſe the danger will be more, and the benefit leſs, *according to the right or wrong uſe of the Waters.* That this was diſcontinu'd, no better reaſon, I think, can be given, than the Humour of the Times, to which alſo, a want of a due method in drinking, and a true underſtanding of the nature of the Waters, may much conduce.

CHAP.

CHAP. XIV.

Of the Virtues of the Bath-water taken inwardly.

THat the Water, and consequently the Salt extracted from it, and dissolved in it, may not be defrauded of their just Commendation internally used by way of Potion, as well as by Bathing, or Lotion, outwardly, and that it may be rightly made use of in a due way and manner, without expecting more from it than in reason is to be done; I shall give a short Account of the Distempers in which it may be profitable, and used with advantage.

And first, in General, I conceive it very proper in all Diseases or Symptoms, that require cooling, cleansing, opening, or gentle Evacuation; under which Heads are comprehended many Maladies, which I shall but briefly touch on, and leave the fuller discovery of its Virtues to experience, and a longer use.

I shall begin with the Stomach, both in regard it is the part it first descends into, and also, because in righting that, it is a general Benefactor to the whole Body, the use of the Stomach being of absolute necessity to every part, without which there can be no supply.

It must therefore infallibly cleanse this useful Receptacle from any impurities lodging in the Bottom or Plicatures thereof, (which may render what is taken in more foul) and prepare it the better for digestion of the food, on which depends the maintenance

tenance of the leſſer Univerſe, conducing much this way to the making better Chyle, purer blood, and more clear and active ſpirits, the wheels and machines of all ſenſe and motion.

The next Advantage is, That it procures an Appetite, and makes thoſe that drink it receive and enjoy their food with more delight and ſatisfaction. This is generally known to all that uſe it, and is effected partly by removing what lines the inner Coat of the Stomach with too much Viſcoſity, with which the fibres, and nervous filaments, the Organs of Senſation, are obſtructed; partly by an Eſurine quality reſiding in the Salt, provoking the deſire of Suſtenance, which we call Hunger, by its immediate application to the parts mentioned before. And in this Eſurine Quality it doth exceed Common Water, of which *Hippocrates* hath written, That it makes men hungry; *viz.* by its waſhing and cleanſing the Stomach, as is declared before; but this by the mixture of the Salt, is made more effectual.

A third Convenience is, That it allays Thirſt, which is often very troubleſom, and ſometimes dangerous to take in Liquors to ſuppreſs it, that may create farther diſturbances in the Body, and prove more offenſive; whereas this, by its cooling and moiſtening nature, is the beſt Remedy that can be provided, and that in no great proportion neither, as hath been often experimented.

It is alſo of good uſe in the Heart-burning, or *Cardialgia*, occaſioned by the ſharpneſs and acrimony of a bilious humour, vellicating the nerves and membranes of the upper orifice of the Stomach, called by the Ancients, by reaſon of its great communication therewith, the Heart; which ſharp and acrimonious humour it alters, waſhes off, and

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at last evacuates, upon which the Passion ceaseth, and ease doth ensue.

Also it clears by its immediate passage out of the Stomach, for some water, I suppose, doth pass that way, whatever obstructions are found in the Vessels about the Stomach, relating either to that or the Caul, arising from the *Vena Porta*, and known commonly among Anatomists by the hard names of *Venæ Gastricæ*, *Epiplocie*, and *Gastro-Epiplacia*, conveying what is transmitted from the Celiack Artery, to the Liver, and so by the *Vena Cava*, to the Heart, according to the undoubted and established doctrine of the Circulation.

Moreover, It is of singular use in all Fluxes, whether with blood, or without; Diarrhea's, Dysenteries, or bloody Urines; not that it hath any strong astringent quality, which ostentimes is prejudicial, but by its absterging and cleansing virtue, and gently evacuative withal, it allays Acrimony, sweeps away pungent particles, and discharges them by the draught. However, if astringent Medicines shall at any time be judged necessary, the Cure will be facilitated, and more speedily performed, if the Water be drank, or used by Clyster, or both ways made use of, before they are advised, which will be a good preparatory to other Remedies.

It is also good in the Colick, on the account before specified, and with the addition of its Heat; insomuch that those that drink the Bath-water, are observed to break more wind than other people, and find great relief in that ease.

It is proper also in the Distemper that is commonly, though improperly, called the Heat of the Liver, when the Face is red, pimpled, and the Body afflicted with cholerick and puttulous Eruptions, having its foundation in the blood, which the Wa-

ter attemperates, and brings down to a just degree, proportionable to the Natural and Balsamick Temper of its prime Composure.

It opens likewise the obstructions of the Liver, Spleen and Gall, and therefore proper in the Spleen, so far as it ariseth from that Cause, and not improper, but very advantagious, in the Scurvy, Jaundise, and obstructions of the Mesentery, which, if the Waters pass, must be much advantage to the Body; in regard there most commonly lyes the *Sentina Corporis*, or Sink of the whole, which is cleansed this way, as the Sewers in *Bristow*, by St. *David*'s Flood.

It is also very beneficial, if moderately taken, in the Gravel of the Kidneys, or any Gravel or Phlegm obstructing them, or the Ureters, which it undeniably cleanseth, and prevents Concretions, which may afterward terminate in Tophes and Stones; so that 'tis a good preservative against the Stone, and will dissolve what is not too firmly impacted, which may be discover'd, if the water pass not freely that way.

It is also of incomparable use in the *Diabetes*, or pissing Disease, which is usually attended with a great drought, which it allays above any thing; and, the quantity moderated for fear of pissing too much, produces great effects, as hath been experienced of late by a Person of Honour.

I doubt not also to commend it in the Dropsie, but care must be taken that it pass well away, otherwise it may prove more prejudicial than advantagious. The like also may be said of the Gout.

'Tis beneficial likewise in the Whites in Women, and what is somewhat consequential, prepares them for Conception; so that in some kinds of Barrenness,

neſs, no more effectual Medicine can be uſed. *Plinius dicit, Aquarum aliquas ſterilitatem fœminarum abolere, & conceptus ipſis repreſentare, ſicut* Simueſſanas *in* Campania; Theſpiarum *fontis in* Bœotia; Elati *fluminis in* Arcadia; *qui effectus ſignificant hujuſmodi Aquas eſſe Nitroſas: Etenim hæ vulvam, quoniam eam abſtergunt, Conceptioni faciunt habilem,* ſaith *Georg. Agricola*; and again, a little after, *Nitroſæ vulvam ad Concipiendum aptam faciunt.* *Nitrous Waters diſpoſe the Matrix to Conception.* So that I queſtion not but that outwardly and inwardly uſed, but chiefly the latter, theſe Waters are very advantagious in that condition.

De Nat. Eor. quæ effl. ex Terra, lib. 2.

The inward uſe is alſo very profitable in all foulneſs of the Blood, the Itch, Scabs, Leproſie, and the Worms.

For the Diſtempers of the Head it may be leſs uſeful, being ſomewhat remote, yet in many not prejudicial; for the fore-quoted Author ſays, ſpeaking of Nitrous Waters; *Capita, ſuccis frigidis qui mentem obtundunt, repleta exiccantes & roborantes, tandem mentem denno acuere, & ſanitati reſtituere poſſunt.* *Thoſe Heads that are filled with cold humours, which dull the mind, Nitrous Waters, by their drying and corroborating faculty, do relieve; and ſharpening the underſtanding, reſtore to perfect health.* Yet in regard this may be referred to the general Head of Obſtructions, as before, I ſhall ſay no more at this time of the Virtues of the Water in particular: only add what *Kircher* ſays of Nitrous Waters in his Chapter of that Subject: *When Nitre is* * *predominant, it makes the Water that hath imbib'd it powerful in operation; enables it to correct an ill habit of Body, which ſuch as are phlegmatick are prone to; it looſes the Belly; is good in the diſeaſes of the Nerves, and for ſuch as are ſubject to defluxions*

* *Theſe Virtues are proportionably in all Nitrous Waters, according as they more or leſs participate of that Mineral.*

upon the Lungs; heals the Itch, and other diseases of the Skin; cures the ringing of the Ears, drops into them; and, in a word, makes it to be of an eminent abstersing property. Where it may be noted, That whereas this Author affirms Nitrous Waters to be good for such as are subject to defluxions upon the Lungs, and consequently for those that are weakned by a consumptive disposition, in extenuated persons; it is easie to determine to which of the Minerals chiefly we may attribute that great advantage an Eminent Chirurgion of this Nation hath lately found by drinking the Waters, who from a thin body, and hoarse voice, hath now recover'd a plump Corpulency, clear speech, and good habit of Body and Lungs, to the great credit and reputation of the Water.

For the satisfaction of those that desire to know which way the Water comes to the Kidneys and Bladder, whereby they may somewhat judg of the usefulness of the Water, and true extent of its operation; I shall briefly, for a close, discourse of that.

The Drink, or Water, which descends into the Stomach by the Gullet, passes thence, either immediately by the Veins, that have a more immediate relation to the Stomach, Caul, *&c.* or mediately, by the lower orifice of the Stomach, called *Pylorus*, into the Guts, whence the most part passeth by the milky Veins to the *Lumbar glandules*, or Kernels of the Kidneys, ascribed to the Learned D. *Th. Bartholine*, Professor at *Copenhagen*, as the first inventer, and answering to the Receptacle of Chyle in *Brutes*; and partly, perhaps, by the Mesaraicks, passeth to the Liver. From those *Glandules*, or the Receptacle, some affirm that the Potulent matter passeth directly to the Emulgents and Kidneys; but

but since this opinion seems not to be beyond dispute, as I have noted elsewhere, I shall add no more as to that here, only admit, that the greatest share of it passes from the Receptacle or *Glandules*, by the milky veins of the Breast, into the right Ventricle of the Heart, thence, through the Lungs, into the left, then into the great Artery, and so, by the Circular motion of the Blood, is carried to the emulgent Arteries, and discharged into the Kidneys, where, by reason of their fabrick, aptly accommodated to the work of Straining, the Serum is separated from the Blood, and drops down by the Ureters, into the Bladder, whence through the *Urethra*, or passage of the Yard, it again visiteth the open air, where I shall now leave it, as of no further use, till it come into the Urinal, and meet with some juggling and quacking Physician.

CHAP.

CHAP. XV.

Of the Water of St. Vincent's *Rock, near* Briſtol.

HAving in the 12th. Chapter of this Diſcourſe made ſome mention of this Water, as a neighbouring Water to *Bathe*, and ſuppoſed only a Continuation thither, which I did not think probable on the Reaſons there alledged; it will not be altogether improper in this place, to treat a little more largely of that, which hath a name among the uſeful Mineral Waters of this Land.

As to the Principles of this Hot-Well Water, as 'tis uſually call'd, without which the Reaſon of the Virtues can never be underſtood, they have been variouſly reported; what I have found on my own obſervation, I here declare.

On the Evaporation of two Gallons of the Water, I had ℈v. of the Contents; of which ℈iv. were a reddiſh ferrugineous Earth, ſomewhat reſembling in colour, an Iron Ore, but in ſubſtance, very light and friable, with a mixture of a Limeſtone: The other ℈. which the Lixivium gave me, evaporated in Glaſs, ſeemed to be Alom, yet in regard the Lime-ſtone may counterfeit Alom, eſpecially when precipitated, I could not abſolutely conclude it to be Aluminous.

To be a little better ſatisfied, I cauſed Mr. *Richard Millechape*, an induſtrious and skilful Apothecary in *Briſtol*, to evaporate one Hogſhead of the Water of the Hot-Well, which he did in a furnace, firſt, to three or four Gallons, afterwards finiſhed it

it in an evaporating Glaſs, and ſent me the Contents, which were little wanting of ℥v ſs. four Ounces of which were, on examination, that red, ruſty colour'd Earth, mentioned before, and ſomewhat, though much leſs in quantity, more white.

Upon this *non*-Saline part, as I call it, to diſtinguiſh it from the Saline part that conſtitutes the Lixivium, being put into a Crucible and calcin'd, I obſerv'd: That the red Earth was not harder, but more friable, and loſt its ruſty colour, becoming more blew; but the white being cold, and mixed with fair water, did, upon the firſt injection, hiſs, and afterwards diſſolve, leaving the water white, and a Limy reſidence in the bottom of the Veſſel I infuſed it in; and both white and blew, after infuſion, being dryed again, became very white and limy.

The other part being Saline imbibed into a Lixivium, I evaporated away to half a Pint, and ſetting it in a cool place, found the next morning, it had ſhot into long ſmall Stiria's, much reſembling thoſe of the Croſs Bath here, to the quantity of ℥iii. the remaining part of the Liquor that did not ſhoot, I breath'd away, and had ℥i. of another kind of Salt, now under examination; ſo that the Saline part is here much exceeded by the *non*-Saline, to which it ſeems to bear proportionably not much more than a 5th. part, and to be contained according to this Eſtimate, ſcarce twelve Grains in a Gallon, whereas that of *Bathe* hath about forty impure.

To give then a ſhort Account of the Principles of this Water, I judg it to conſiſt of Iron, a Nitro-Sulphureous Salt, and ſome Lime-ſtone, according to the proportions before deliver'd, and the Contents

tents Saline, and *non*-Saline, to be, in all, near half as much as in the Waters of *Bathe*, where the Salts are a third, and here a fifth, or thereabout, as was mentioned before.

That very little of an acid is contained in these Waters, may appear from this, That neither the cold Water, nor a strong Lixivium made of the Salt, will either turn with Galls, or coagulate Milk; neither doth any thing glebous shew it self among the Shoots I have had yet.

What the other Salt is, which I have not yet fully examin'd, and tasts much Alcalizate, I do here promise to declare on another occasion: only for the present, which is all I shall say of the Principles of this Water now, To make it further evident, that this is Lime-stone, after the *non*-Saline part was well calcin'd, with a strong fire, in the water of that I decocted Sulphur, which it did dissolve, and was precipitated with a fetid smell, both by distill'd Vinegar, Spirit of Vitriol, and Oyl of Tartar, in a considerable quantity.

This Water then though participating of the same Salts with the Water of *Bathe*, but not in that proportion, cannot be expected to be as advantagious in the same Distempers, as it is less hot; but containing so much of Iron, hath that advantage above it, and may be as effectual as *Tunbridg* Waters, in any Diseases that Water is proper for, and, for ought I know, do every way as well.

CHAP.

CHAP. XVI.

Of Castle-Cary *Water.*

THE Mineral Water in *Somersetshire*, commonly known by the name of *Castle-Cary*, or *Alford*-water, being of a quick working nature, and by some persons made use of at *Bathe*, deserves also an Examination; which I the rather do here, in regard it may confirm and illustrate what I formerly discourst of, concerning the Nature and Virtues of the Baths of *Bathe*, to which it may be also very subservient.

By Tryals therefore, according as I had done on the Waters of *Bathe* and *Bristol*, I find it to consist of some parts Saline, some *non*-Saline. The Saline part is chiefly Nitrous, Nitre being almost double to the other Salts; and therefore I judg this Water, *Nitrosa à prædominio*; Nitre appearing in a nauseous taste, apparent bitterness, cooling, penetrating, and shooting into as long and firm Stria's, as I have ever seen in the King's, or Hot Baths.

The other Salt, is common brown Salt, arising, I conceive, from a small Rock or Mine, of that sort of Salt in the ground about the Spring. This, I said, is little more than half the proportion of the former, and shews it self in proper Squares or Cubes, peculiar to that Salt, the Nitre shooting first, and this Salt last of all.

The parts *non*-Saline are likewise double:

First, A red Gritt, arising also from a Rock of that colour, and is the proper Gritt of the ground;

next

next the Earth under the Sward, of which I am now to treat a little. The Earth under the surface of the ground is first, a stiff blew Marl: under that a white Clay: and last of all the Red Rock.

The Earth, the second part *non*-Saline contained in the Water, is chiefly the latter, I mean the white Clay, which with the Rocky Sediment, makes up near the proportion of the brown Salt, or rather somewhat more, the Rock bearing not a fourth part to the Clay.

Out of 12 Gallons of this Water wanting 3 Pints, I had ℥18. ℥vi ſs. of the Contents, beſides droſs and ſcum in the depuration of the Water, of which ℥iii. Nitre; ℥i. ℥vi. brown Salt; and ℥ii. Earth and Rock. ℥iii. gr. 30. loſt in working. So that ℥ſs. of Salt is contained in every Gallon of the Water, or proportionably ℥ſs. in every Pint, or between 20 and 30 Grains, of which two parts are Nitre, and one brown Salt.

Note, That out of the quantity of Water mentioned before, I had of the pure refined Salt only ℥iv. 2 Drams, and 40 Grains, in a Gallon; 20 Grains in a Pint.

This Water then muſt be of good uſe to cool, cleanſe, penetrate and attenuate groſs humours; allay acrimony; attemperate and ſuppreſs undue fermentation. Good in the Spleen, Scurvy, Jaundiſe, and all obſtructions of the Meſentery and Bowels, having all thoſe properties *Kircher* gives of Nitrous Waters, mentioned *Chap.* 14.

It cleanſes the Kidneys and Ureters, and is very beneficial in the Stone, moving by Siege, Urine and Sweat, and that very effectually, in regard the Minerals are ſo ſtrongly imbibed, which makes it better to be mixed with the Water from the Springs

at

at *Bathe*, which, having the same Salts are less, operative, because less impregnated.

And thus having discours'd of Three Mineral Waters, by the Salts, the main of their Composition, somewhat related, St. *Vincent's Hot Well*, less impregnated; *Bathe*, more; and *Castle-Cary Water*, in the highest degree; I hope the best use will be made of them all. And so I take leave of this Subject for the present, referring the Curious to more Particulars, concerning the principal part of my Design, to the ensuing *Century of Observations*.

A CENTURY OF Obſervations:

Containing further

DISCOVERIES

Of the Nature of the

HOT WATERS at *BATHE*;

With the

Contents, Property, and Diſtinction of each Bath, in particular.

By *T. G. M. B.*

LONDON,

Printed for *Henry Brome*. MDCLXXVI.

A

OBSERVATIONES HYDROSTATICÆ;

OR,

OBSERVATIONS

Relating to the

Waters Weight.

OBSERV. I.

THAT the Weight of the Water of all the Baths is much alike, only the Hot Bath Water is somewhat lighter than the King's and Cross, as is further evidenced in the following Observations.

Observ. II.

That the Bath-water if exactly weighed, is

lighter than Common Water by 2 ounces in a Gallon; for 12 Gallons of the Bath-water weigh-ed but 95 pound 14 ounces, whereas Common Water as much weighed 97 pound, 6 ounces; 24 ounces, or ℔iſs. difference. The like will hold in ſmaller proportions, as ℥ii. in a Pint, and ℥i. in a Pint, and ℥i. in a Pottle. Note,

That this Obſervation was made in Froſt, and muſt be underſtood of Bath-water cold. See *Obſ.* IV.

Obſerv. III.

That a Gallon of the Bath-water hot, weighed 8 pound, 8 ounces; 2 pound, 2 ounces, the Quart: Cold, 8 pound, 2 ounces and half; 2 pound ℥v. the Quart. 5 ounces and half in a Gallon wanting; ℥xi. in a Quart; ℥vſs. in every Pint.

Obſerv. IV.

That the uſual proportion in open dry weather is Common Water ℔i. ℥vi. the Pint; Bath-water hot ℔i. ℥v. Bath-water cold ℔i. ℥iv. Bath-water 1 ounce in a Gallon leſs cold than hot; ℥i. lighter than Common Water hot; ℥ii. cold. Note,

That this Obſervation is chiefly to be underſtood of the King's and Croſs Bath; and of the Meaſure, Weights and Scales uſed at that time.

Obſerv. V.

That Bath-water hot being weighed a ſecond time, in like proportion, againſt Common Water, in open Scale, both Waters did very near, in open weather, balance each other, but ſtanding in the Scale, till the Bath-water was cold, the Bath-wa-

ter

ter required ℥ii. in a Pint, to make up the Balance.

Obſerv. VI.

That on another Tryal made *Nov.* 18. 75. in open weather, Bath-water hot, and Common Water did weigh much alike; but cold, wanted ℥ii. in a Pint of its own weight hot, and (conſequently) was ℥ii. in a Pint, or ℈ii. in a Gallon, lighter than Common Water.

Obſerv. VII.

That at any time, Bath-water hot, nor cold, was not heavier than Common Spring-water.

Obſerv. VIII.

That the ſame Pint of Bath-water weighed at the firſt 12 hours end, after taking from the Springs, ſtanding 12 hours longer, did weigh lighter by ℥i.

Obſerv. IX.

That by a Pint, Wine-meaſure, the Croſs Bath Water exactly weighed, 17. *Nov.* 75. did weigh ℔i. ℥i. ʒv. and 8 grains.

Obſerv. X.

That the King's Bath Water weighed much the ſame, by the ſame Meaſure, Weights and Scales, at the ſame time, and, if any difference, the King's was ſomewhat heavier, being immediately weighed in the dry-Pump Room.

Obſerv. XI.

That the Hot Bath Water 1 Pint, weighed then at the King's Bath, did weigh ℔i. ℥i. ℥iii. ʒſs. and 4 grains; but at the Hot Bath, with the ſame Meaſure, Weights and Scales, weighed ℔i. ℥i. ℥iv. and 12 grains; 38 grains more than at the King's Bath.

Obſerv. XII.

That the Hot Bath Water, one Pint, weighed ℥ii. 8 grains lighter than the Croſs.

Obſerv. XIII.

That the Water of the Hot Bath, one Pint, weighed 42 grains lighter than the Kings.

Obſerv. XIV.

That the two former Obſervations immediately foregoing, were made with the Hot Bath Water, againſt the juſt weight of the King's and Croſs, and the Meaſure twice filled with the greateſt exactneſs, may cauſe this little Variation of 6 grains between King's and Croſs; but if the eſtimate be made from the weight of the King's, Croſs, and Hot Bath Water, at, or near their reſpective Pumps (as in *Obſ.* 9, 10, 11.) then the Hot Bath Water, one Pint, is 56 grains lighter than either King's, or Croſs.

Obſerv. XV.

That the Hot Bath Water is the lighteſt of all, but the King's and Croſs are in weight much alike, pro-

provided the Water of both be weighed, at or near the Pump of either Bath.

Obſerv. XVI.

That the Menſtruum, or Water imbibing the Minerals of the Hot Bath, is lighter than that of the King's or Croſs: for in one Pint of the former are contain'd 11 grains $\frac{1}{4}$ (as in *Obſ.* 69.) and the two latter but 9 grains $\frac{1}{2}$ (as in *Obſ.* 67,68.) one grain $\frac{1}{3}$ more in a Pint of the Hot Bath Water, than the Croſs or King's, and yet the Hot Bath is ſo much lighter than either King's or Croſs, according to the former Obſervations.

Obſerv. XVII.

That as the King's Bath Water hath as much leſs Marle, as it hath more Gritt than the Croſs; ſo the Croſs Bath on the contrary, hath more Marle, and leſs Gritt than the King's: which makes the contents even, and the weight of the Water equal, the Menſtruum of both weighing both alike.

Obſerv. XVIII.

That the drinking Pump in the King's Bath, and dry Pump out of it, convey out Water of an equal weight: neither is that received at the dry Pump, lighter than that which is taken immediately from the Springs.

Obſerv. XIX.

That the Water of none of the Baths, did at any time weigh heavier than Common Water, by the ſame Meaſure, Weights and Scales.

Obſerv. XX.

That Hydroſtatical Obſervations may vary, according to the difference of Weather, Water, Meaſure, Weights and Scales; but that what is mentioned before in relation to that Affair, is done (I judg) with as much exactneſs as may be.

Ob-

OBSERVATIONES CHROMATICÆ:

OR,

OBSERVATIONS

Concerning the

Waters Tincturing.

Obſervation XXI.

THat the Water of all the Baths warm will tinge with Galls.

Obſerv. XXII.

That the ſame quantity of Bathwater warm, with the ſame proportion of Galls, gives a deeper Tincture in froſty weather, than in open.

Obſerv.

Obſerv. XXIII.

That the New Pump, and dry Pump, at the Kings Bath, Tincture both alike, but the Water of the Bath it ſelf, not at all.

Note,

That this Obſervation is to be underſtood of the Bath when full; for if trial be made when the Bath is filling, and the water low, the water of the open Bath will Tinge, as coming more immediately from the Springs.

Obſerv. XXIV.

That a Glaſs-bottle filled with water hot from the Kings Bath, well cork't and ſeal'd, gave a deep tincture with Galls, in open weather, 48 hours after.

Obſerv. XXV.

The like Tincture, but ſomewhat more faint, I have obſerved at three daies end.

Obſerv. XXVI.

That the Water of the Kings, Croſs, and Hot Baths, being kept cloſe ſtopt and ſeal'd for the ſpace of ſeven daies, the King's Bath did turn with Galls, but the Croſs and Hot were not alter'd at all.

Note,

That here might be ſome fault in ſtopping, for on another Trial, the Croſs Bath, on the ſeventh day, did give a tincture. *See Obſ.* 45.

Obſerv.

Obſerv. XXVII.

That the water of the Kings Bath well ſtopt and ſeal'd, did, at eight weeks end, give a purple tincture with Galls, little different from what it did, when taken hot from the Pump.

Note,

That this I had from the Relation of another, and is not conſonant to my other Obſervations: if ſo, there muſt be then a long Froſt, which I have not met with ſince.

Obſerv. XXVIII.

That the Water of the Croſs Bath corkt, and waxt, gave a pretty brisk tincture, on the ſixth day after taking from the Pump, in open weather, although the bottle had been open'd and wax't up again two daies before. The Kings Bath Water alſo taken at the ſame time did turn, but not ſo ſoon, and more faint. Another bottle alſo of the Kings Bath did the like, filled *Nov.* 6. and open'd *Nov.* 12. the ſame daies as before.

Obſerv. XXIX.

That the Water of the Hot Bath corkt and waxt, and open'd at 24 hours end, did not ſtrike a purple tincture with Galls, though carefully made up, as ſoon as taken from the Pump.

Obſerv. XXX.

That another Vial of the Hot Bath-water open'd at three hours end, in open weather, did not

not tincture, though corkt and waxt as the former.

Observ. XXXI.

That two bottles of the Water of the Crofs and Hot Bath, open'd twelve hours after ſealing at the Pump, in Froſt, and in a ſhort time carefully ſealed up again, did the next morning, twelve hours after, give a tincture both with Galls and Oaken chips, but ſooner and higher the Crofs.

Obſerv. XXXII.

That two bottles of the Water of the Crofs and Hot Bath filled from the Pump, and ſtanding twenty four hours in Froſty weather, unſtopt, the water of both the Baths did turn with Galls, but ſooner and deeper the Crofs.

Obſerv. XXXIII.

That the Water in the ſame bottles ſtanding twenty four hours longer unſtopt, the water ſtill continuing Froſty, the Crofs Bath water did tinge as formerly, but that of the Hot was not alter'd at all.

Obſerv. XXXIV.

That three hours after the former Experiment, the weather then breaking that had been froſty before, neither Hot nor Crofs Bath water was conſiderably alter'd, though the water of the Hot Bath was but three hours before taken hot from the Pump. The Crofs Bath water, that but that morning had Tinged very well after forty eight hours ſtanding, did then very little; and the Hot

taken

taken immediately from the Pump but three hours before, not at all.

Observ. XXXV.

That two glass Vials of the Cross and Hot Bath-water well corkt and seal'd up hot, and open'd at three daies end, the Cross Bath water did tincture with Galls, but the Hot was very little alter'd. Another half pint bottle corkt and waxt, open'd at four daies end, the water of the Hot Bath, gave no tincture at all.

Observ. XXXVI.

That trial having been made with Galls, on the Water of all the Baths unstopt, at ten hours end, in open weather; The Hot Bath lost its Tincturing first; the Kings decayed much next; but the Cross Bath gave a tincture much brighter than the Kings.

Observ. XXXVII.

That the next morning, thirteen hours after, the weather still continuing without frost, the Cross Bath did tinge very well; but the Kings Bath very little,

Observ. XXXVIII.

That after six hours more, the Cross Bath did tinge as formerly, but the water of the Kings did not tincture at all.

Observ.

Obſerv. XXXIX.

That eighteen hours after that, the Croſs Bath in the ſame open weather unſtopt, gave a very faint tincture with Galls, after ſome ſtanding, and ſhortly after became as the Kings the day before.

Obſerv. XL.

That the Water of the Kings Bath in open weather, unſtopt, gave no tincture with Galls at 18 hours end, when the Croſs Bath did at 28.

Obſerv. XLI.

That the ſame Water of the Croſs Bath kept unſtopt, in open weather, 18 hours longer, or at 46 hours end, did not tincture with Galls, but in a ſhort time became thick and white.

Obſerv. XLII.

That the Kings Bath-water that Tinctur'd faintly in the morning, at ſix daies end, in open weather, ſtopt again with Cork, but not waxt, four hours after did not tincture at all.

Obſerv. XLIII.

That the Kings Bath-water unſtopt in open weather at 10 hours end, gives a faint tincture with Galls; at 18 hours very little (if any;) and at 24 hours none at all, unleſs in froſt, or weather froſtlike.

Obſerv.

Observ. XLIV.

That the Cross Bath-water unstopt loseth its tinging in little more than 48 hours, in any weather.

Observ. XLV.

That the Water of the same Bath stopt and seal'd, will tincture after six or seven daies, with a faint tincture; but after nine daies, in open weather, will not tincture at all.

Observ. XLVI.

That the Water of the Hot Bath unstopt, in open Weather, will give no tincture with Galls after three or four hours, although the Water then retain somewhat of its heat.

Observ. XLVII.

That the Water of the same Bath open'd or stopt, will not turn with Galls after three or four daies, in any weather.

Observ. XLVIII.

That the Kings Bath-water unstopt, did give a purple tincture with Galls at four daies end, in frost, and the fifth day, the weather breaking, with fresh Galls added to more of the water became turbid and white, much resembling Almond-milk.

Observ.

Obſerv. XLIX.

That the Croſs Bath-water cold and unſtopt, in open weather, tinctures longer than the Kings.

Obſerv. L.

That the Hot Bath-water unſtopt loſes its tincturing before 'tis cold, or in four hours time at moſt; The Kings Bath ſeldom exceeds 24 hours, and the Croſs 48, in open weather.

Obſerv. LI.

That the Water of all the Baths may appear ſomewhat purpliſh after the times before mentioned, but that faint colour ſeldom holds more than three or four minutes before the water grows thick, and for the moſt part white; in long ſtanding paliſh yellow; with fewer Galls, more green, and ſometimes black.

Obſerv. LII.

That the Water of the Croſs and Hot Baths kept in two Vials ſtopt with cork, but not ſeal'd, for the ſpace of two years, did then with oyl of Tartar become white, although both had depoſited a ſediment, as well white as yellow. The Water of neither did tinge with Galls.

Obſerv.

Obſerv. LIII.

That the Halitous part is not made more viſible, nor can be ſaved by diſtillation, although the joynts be luted never ſo cloſe; neither is the firſt diſtilled Water acid, nor will turn with Galls. The like hath Dr. *French* obſerved, in the vvaters of the Vitrioline Well at *Knaresborough*, *Yorkſhire Spaw*, p. 67.

Obſerv. LIV.

That the Water of all the Baths effete, and deveſted of their Tincturing purple with Galls, in a ſhort time become opake, and ſomething like a thin Whey, or as if ſome few drops of oyl of Tartar had been mixed with it.

Obſerv. LV.

That the Bath-water loſes its Tincturing with Galls, although nothing be obſerv'd to be precipitated.

Obſerv. LVI.

That the Bath-water ſealed up in a glaſs bottle cold, and laid near the Springs of the Bath twenty four hours, doth not then recover its Tinging property with Galls, but becomes white as precipitated with oyl of Tartar, which Spirit of Vitriol makes clear again.

Obſerv. LVII.

That the cold Water of none of the Baths, except the Croſs, ſtanding 24 hours before Trial unſtopt, vvill Tinge vvith Galls or otherwiſe, in open weather, unleſs well ſtopt and ſeal'd up hot.

Note,

That in Froſt-like vveather, in the Winter ſeaſon, the Croſs Bath chiefly, and ſometimes the Kings, may colour after this time; but not after 48 hours unleſs in conſtant froſt.

Obſerv. LVIII.

That the Water of the Drinking-pump lately erected in the Kings Bath, tinges with Galls no longer than that of the Dry-pump; but both within ten, and twenty hours ſpace, unſtopt, in open weather, loſe their Tincturing and become effœte.

Obſerv. LIX.

That the Kings Bath-water at eight daies end, and the Croſs at nine, in open vveather, did not give any tincture with Galls, although Trial was made on ſeven glaſs Vials (4 of the Kings, and 3 of the Croſs) corkt and waxt, at the ſame time, and ſucceſſively open'd and experimented, with good freſh Galls injected into every Glaſs.

Obſerv. LX.

That how long the Waters of all the Baths will Tincture in Froſt, this Winter proving very mild, hath not yet given me an opportunity to experiment.

O B-

OBSERVATIONES MISCELLANEÆ;

OR,

OBSERVATIONS

Touching divers Subjects; more especially, The Contents of the Waters, and Things appertaining thereunto.

Observ. LXI.

THAT the Water of all the Baths, though clear and transparent in a Glass, do contain in their Body, a considerable quantity of a fine, white, insipid Powder, which afterwards, by decoction, becomes more brown and gritty, with a blew Sulphurous Earth or Marle, and a Saline matter.

Obſerv. LXII.

That the Contents of the Bath are leſs in the ſame proportion of Water, in wet weather, than in dry.

Obſerv. LXIII.

That the Saline matter producible in Subſtance from the Bath-water, ſubjected to the Sight, and other ſenſes concern'd, are only Common Salt and Nitre.

Obſerv. LXIV.

That out of one Hogſhead of the Water of the Kings Bath taken from the Pump, in wet weather, I had ℥x. ℨvſs. whereof ℥v. ℨiii. were Gritt; ℥ii. ℨviiſs. Salt; ℥ii. ℨiſs. Marle.

Note,

That after this proportion, Gritt hath five parts; Salt about three parts; and Marle two; Common Salt more than two; Nitre one.

Obſerv. LXV.

That out of one Hogſhead of the Croſs Bath in the ſame weather, came ℥xviii. ℨv. whereof ℥iv. Gritt; ℥iii. ℨi. Marle; ℥ii. Common Salt; and ℥ſs. of Niter.

Ob-

Observ. LXVI.

That one Hogshead of the Hot Bath, in the same weather, yielded ℥xi. ℥iii. whereof ℥iv. ℥iv. Gritt; ℥iii. ℥ii. Marle; ℥ii. ℥vi. Common Salt; and ℥vi. of Nitre.

Observ. LXVII.

That the King's Bath one Gallon ordinarily contains near 43 grains of Gritt; 23 grains ½ of Salt; 17 grains ½ of Marle; in all ℈iv.7 grains. 5 grains Gritt; 2 grains ½ Salt (*viz.* 2 grains *Sal Commune*, and ½ grain Nitre) and 2 grains Marle, the Pint. In all 9 grains ½.

Observ. LXVIII.

That the Cross Bath one Gallon contains near 32 grains Gritt; 25 grains Marle; 16 grains *Sal Commune*; 4 grains Nitre; in all ℈i. gr. 14. 4 gr. Gritt; 3 gr. Marle; 2 gr. *Sal Commune*, and ½ gr. Nitre, the Pint. Total 9 gr. ½.

Observ. LXIX.

That one Gallon of the Hot Bath Water contains near 36 gr. ½ of Gritt; 26 gr. Marle; 22 gr. *Sal Commune*; and 6 gr. ½ of Nitre. 4 gr. ½ Gritt; 3 gr. ¼ Marle; 2 gr. ⅓ *Sal Commune*; ⅓ gr. of Nitre. Total 11 gr. ¼ in a Pint.

Obſerv. LXX.

That the Gritt in proportion is almoſt double to all the Salts in the King's Bath, more.

Obſerv. LXXI.

That the Common Salt is near three parts, and the Nitre but one.

Obſerv. LXXII.

That the Hot Bath Water contains by more than a fourth part more Nitre than the Croſs. The like will hold as to Common Salt.

Obſerv. LXXIII.

That the Proportion the Saline part bears in the King's and Croſs Bath, is near ℥iiſs. in a Hogſhead, or 60 Gallons; but in the Hot Bath ℥iii. or ſomewhat better. So that in a Gallon of the two former are no more than 20 gr. Salt, 2 gr. ½ in a Pint; in the latter 24 gr. in a Gallon, or 3 gr. in a Pint.

Note,

That what is aſſerted in the two Obſervations immediately preceding, concerning the Hot Bath Water containing more than the King's or Croſs, was done on a ſingle Experiment, which I have not ſince repeated.

Ob.

Obſerv. LXXIV.

That one Hogſhead from the Pump of the King's Bath, in froſty weather, afforded ℥xii. ℥ii. of the Contents; whereof ℥vi. *Gritt*; ℥iiiſs. Salt; and ℥ii. ℥vi. Marle; ℥ii. ℥ii. *Sal Communis*; and ℥x. Nitre.

Note,

That the ſame quantity of the Croſs and Hot Bath Water I have not experimented in froſt, but judge them proportionable to the King's, upon which is grounded the 62. Obſervation.

Obſerv. LXXV.

That the Nitrous parts of the King's and Hot Baths ſhoot much alike, into ſtrong, firm, and compacted Needles; but the Croſs Bath more faint, into ſmall hoary Threads, ſlender, ſhort, and brittle.

Obſerv. LXXVI.

That what I call Marle, is chiefly that inſipid blew Earth which remains on the filtring paper after Calcination, and in part burns away to leſs in the Crucible, being the *Terra* adhering more nearly to the Salt, and in which (probably) the Sulphur doth reſide.

Obſerv. LXXVII.

That the Croſs Bath Water hath leſs Gritt than the King's.

Obſerv. LXXVIII.

That the King's Bath hath as much Nitre as the Croſs, although the form of ſhooting be different.

Obſerv. LXXIX.

That the Water both of the King's and Croſs Baths, have an operation in Potion much alike, only the Croſs Bath drinks more pleaſant, the reaſon of which may be gather'd from *Obſ.77.*

Obſerv. LXXX.

That the Bath-water cold will coagulate Milk.

Obſerv. LXXXI.

That ℈ii. of the impalpable Powder precipitated from the Bath-water with oyl of Tartar, and mixed with Spring-water, did not coagulate Milk, when 20 grains of Alom did it effectually.

Note,

That half a Pint of Water will turn the Milk; and that this quantity of the Powder is near as much as is contained in a Gallon.

Ob-

Obſerv. LXXXII.

That ℥i. of the white Salt diſſolved in half a Pint of Spring-water, and mixed with as much boyling Milk, made no alteration; whereas ℈i. of Alom diſſolved in like manner, made a clear Poſſet, with a hard Curd.

Obſerv. LXXXIII.

That the precipitated Powder, though fine, white, and impalpable, if precipitated, in Evaporation becomes more groſs, browner, and gritty, and upon ſettlement leaves the bottom of the Water thick and white.

Obſerv. LXXXIV.

That the ſame Powder when precipitated, put on a red hot Iron Plate, neither boyls, crackles, nor melts, but lyes heavy, dead, and burns not at all.

Note,

That this impalpable Powder bears an equal proportion with, at leaſt, if not exceeds all the Salts contained in the ſame.

Obſerv. LXXXV.

That the Infuſion of the yellow Crocus, or Ochre, poured on a Solution of *Sal Chalybis*, with the addition of Galls, makes a deep purple firſt, and afterwards black.

Ob-

Obſerv. LXXXVI.

That the Bath-water receives no alteration by being cloſe ſtopt with wax; nor will, unleſs by long ſtanding, depoſite any Sediment that way.

Obſerv. LXXXVII.

That the Salts do exhale; as is evident from this Obſervation. On the 20th. of *February*, 167$\frac{4}{5}$. the Croſs Bath having been kept drawn 5 or 6 days, and the Water ſo low, that the tops of many of the Stones did appear above it, a Salt of the ſame nature with that which is extracted, was obſerved to adhere to the Stones above the Water, reverberated by the ambient air, the ſeaſon then very froſty, and fixed on the Stones in the nature of a Candyed drop, or ſmall white tip, or ſpeck, reſembled by ſome that ſaw it to the excrements of Birds; ſome of the Stones I brought away, which a month after abated nothing of their Saltneſs, neither would have done, if kept till this time. Mr. *Henry Dyer*, Serjeant of the Croſs Bath, gave me notice of it as an unuſual accident, and *Robert Baulch*, at the White Horſe againſt the Hot Bath, collected a good quantity from the tops of the Stones, which he afterwards gave me for examination. It did melt on an Iron Plate, and left a Calx much like the Chryſtals, the taſte chiefly alcaliſate. The like Concretion I obſerved a ſecond time, 24 *Octob.* 1675.

Note,

That the King's Bath hath not yet afforded the like Obſervation, in regard the Water of that Bath cannot well be drawn ſo low. *Ob-*

Observ. LXXXVIII.

That an exact Pint of the Bath-water put into a Pint glass Bottle, and the height of the Water presently marked, the Bath-water cold subsided lower than the mark on the neck of the Bottle unstopt, the breadth of half an inch.

Observ. LXXXIX.

That the subsiding or seeming Vacuity, mentioned in the former Observation, did appear within the space of two hours, although the Bottle well fill'd was immediately stopt and seal'd.

Note,

That Common Water waxt up warm, will subside in the neck of the Bottle, after the same manner as Bath-water doth: The Bottle top full, a void space of half an inch afterwards appearing, *Q. annon hic detur Vacuum?*

Observ. XC.

That the Sand of the Bath doth consist of Free-stone-Gritt, Marle, Ochre, Shells, Rubrica, Chrystal Pebbles, and Sulphur; and that nothing Saline is contained in the same.

Observ. XCI.

That the Sand of the Bath dryed and weighed after the affusion of warm water on it, and has so continu'd for some time, is not sensibly diminisht in

in its weight, of what it was of before the affusion of the water, neither is the water any thing salter, but a little more rough.

Observ. XCIII.

That a large quantity of the Sand calcin'd in a Flemish Crucible, with as great a heat as could well be given, no Concretion was observed, but dead gritty ashes, neither did the water in which it was afterward infused, become more salt.

Observ. XCIV.

That the Sand of the Bath put on a red hot Iron Plate, and held in a dark place, burns very blew, and smells much of Sulphur, if only lying some time before a strong heat.

Observ. XCV.

That the Sand of the Bath on the affusion of Vinegar, or any acid Liquor, will ferment.

Note,

That Common Freestone, and Shells, will do the like.

Observ. XCVI.

That the Mud of the Bath dryed will ferment as the Sand.

Observ. XCVII.

That the Mud of the Bath doth consist of a blew Marle, some Shelly, or Testaceous particles, and more Sulphur than the Sand. *Ob-*

Observ. XCVIII.

That the foul Contents of the Bath put into a Crucible for Calcination, in order to the making the Salt more pure, before the Marly or Muddy parts are consum'd, the Crucible then open'd, and the Contents touched with a Spatule, give a very strong stench of Brimstone, and burn as blew, as ever I saw any Sulphur do.

Observ. XCIX.

That the Mud it self hot hath a Sulphurous smell, and is very useful if apply'd in these external Distempers, which Sulphur doth relieve.

Observ. C.

That the Scum of the Bath arising usually most in *June*, *July*, and *August*, floating on the Surface of the Waters, dryed into Cakes, burns like Stone-Pitch; and being once kindled, goes not out till all be consum'd.

These Observations are made according to present Experiments; Anomalous Observations may be noted afterwards.

THE

THE LIVES AND CHARACTER OF THE PHYSICIANS OF BATHE,

From the Year, MDXCVIII,

To this present Year, MDCLXXVII.

In which,

Within the compass of Fourscore Years, is comprehended great part of the Lives of XVII. Physicians, which confirms the words of *Hippocrates*, in his first *Aphorism*;

Ars Longa, Vita Brevis.

By *T. G.* M. B.

LONDON,
Printed for *Henry Brome*, MDCLXXVII.

THE

LIVES

AND

CHARACTER

OF THE

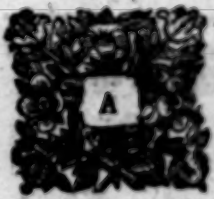
PHYSICIANS

OF

BATH.

TO THE READER.

Courteous Reader,



Although he that writes the Life of another man, doth almost the same thing as he that takes upon him the care of a friend in Trust, which, however faithfully discharged, is oftentimes accounted but a Thankless office; yet I have adventured to give in the following Papers, a brief account of some particulars relating to the Physicians of Bathe, *with all the Truth and Candour that I can; and if my Expressions, which I have smoothed what I may, in a few places seem to grate and bear hard upon some, I would have those consider that shall take exception at it, that 'tis not my fault I had not better matter; and if I have proceeded as near as I could, according to the Subject, as I'm sure is done, it will appear that I have not industriously abused the dead, or disgusted the living, but*

uſed diſtributive Juſtice, in giving every one his due.

This may alſo encourage others that have the like opportunity, to do the ſame, that ſo thoſe modeſt Meal-mouths, that think it too great an honour to publiſh any thing in their own time, (whereby I am perſwaded Learning hath been more injured than by any one thing whatſoever, good Copies by this means falling afterwards into the hands of corrupt and illiterate perſons) may not want their juſt commendation; and thoſe that keep their own breath, as we ſay, to cool their Pottage in a Chimney-corner. may have this good uſe of another mans. Whether well or ill, Quod ſcripſi, ſcripſi, *and ſo Farewel.*

THE

THE Lives and Character OF THE PHYSICIANS OF BATHE.

HAVING hitherto discourſed of the Waters and City, I think it not improper here to give ſome account of the PHYSICIANS of *Bathe*; both in regard they have been as eminent as any, I think, in any part of *England*, and alſo for the moſt part have been continued in a *Series* of Judicious, able men, well qualified and graduated in Univerſities, which deſerve the greateſt and moſt particular mention here. And although I would have wiſhed, that they had ſignaliz'd themſelves on the place,

by ſome other way beſides their practice, by which more remarkable Memorials would have remained to poſterity, and been a good occaſion of my Commendation; yet ſince they were pleaſed, for reaſons beſt known to themſelves, to paſs by the thing that beſt deſerv'd their conſideration, I mean the nature of the Waters, (only one or two having written of them) I ſhall not make them the like requital, but give what account I either know or can procure, and gather up the fragments of their Memories that remain. And firſt of Doctor *Reuben Sherwood*.

---

1. Doctor *Reuben Sherwood*.

OF Dr. *Reuben Sherwood*, the firſt Phyſician I meet with any remembrance of, I can give no other account than that he died here *Anno Dom.* 1598.

2. Dr. *Thomas Elton*.

DOctor *Thomas Elton* 'tis likely was contemporary with Dr. *Sherwood*, or not long after, whom he ſurvived twenty years, and was buried at *Bathe*, Aug. 11. 1618; A well bred Gentleman, obliging and affable.

3. Dr.

3. Dr. *John Sherwood.*

AT the same time also flourished Dr. *John Sherwood*, graduated in the University of *Cambridge*, who died two years after Dr. *Elton*, and was buried in the Church of St. *Peter* and *Paul*, in the South-Isle, as appears by this indifferent poetry on a piece of Brass against the Wall; in which he is recommended to posterity with this bare Title: *Joannes Sherwood Doctor Med. Sepultus 16 Febr. 1620.*

The Verses these;

Conditur hic Sherwood, *medicâ præclarus in arte*
Doctor, adhuc cujus fama coruscа volat:
Ossa licet lateant hujus sub mole sepulchri,
Spiritus æthereâ vivit in arce poli.

Which may thus be answerably translated:

Here famous Doctor *Sherwood* lies,
Whose skill in Physick Lore
Was great, and his bright Fame yet flies,
Both now and evermore.
Although within this Tomb his bones
Are hidden out of sight,
His Soul, not pent within these stones,
To Heav'n hath ta'n her flight.

Of him I can learn nothing more observable, than that he was of the *Romish* Religion, and a good Housekeeper.

4. Doctor *Edward Jorden.*

CConcerning Dr. *Jorden*, whoſe Name is yet freſh, and memory very acceptable to all that knew him, having left the deſerved Reputation of a Learned, Candid, and Sober Phyſician: I have written ſomething heretofore, and ſhall only here again mention ſome particulars more nearly relating to his perſon and condition.

Doctor *Jorden*, I underſtand, was a Gentleman of a good Family, and, being a younger Brother, deſigned for a Profeſſion, for which when he had accompliſh't himſelf, by a convenient courſe of ſtudies in his own Country, he travelled abroad to ſee the Manners and Cuſtomes of the Univerſities beyond Sea, and having ſpent ſome time there, eſpecially at *Padua*, where he took the degree of Doctor in Phyſick, returned home, practiced at *London*, became an eminently ſolid and rational Philoſopher and Phyſician, and one of that famous and learned Society, *The Kings Colledge of the Phyſicians there.*

He had a natural inclination to Mineral works, and was at great charges about the ordering of Alom, which ſucceeding not according to expectation, he was thereby much prejudic'd in his eſtate, as appears from theſe words in the ſeventh Chapter of his Treatiſe of *Nat. Baths* and *Mineral Waters*; Now I come to *Allum (Indignum vox ipſa jubet renovare dolorem,)* the greateſt debtor I have, and I the greateſt benefactor to it, as ſhall appear when I think fit to publiſh the artifice thereof. For the Patent or Grant for the profit of the Alom works, which he reaſonably did expect,

ſell

ſell afterwards, I know not how, to Sr. *Arthur Ingrams* lot, although the Doctor alſo had a good ſhare in the affection of King *James*.

After he had practiſed ſometime in *London*, he ſettled at *Bathe*, where living many years, and having Children not a few, his converſation was ſo ſweet, his carriage ſo obliging, and his life ſo anſwerable to the port and dignity of the faculty he profeſt, that he had the applauſe of the Learned, the reſpect of the Rich, the prayers of the Poor, and the love of all. But living a ſtudious and ſedentary life, which might encourage his two grand diſtempers he labours under, the Stone and Gout, departed this life in the great Climacterical year of his age 63, and of our Saviours Nativity 1632, lying buried in the South Iſle of the Abbey Church, but without a Monument, or any Inſcription. And thus much for Dr. *Jorden* who was the firſt Phyſician that writ any thing of the Waters, that reſided on the place.

5. Doctor *Edward Lapworth*.

DOctor *Lapworth* was bred up in the famous Univerſity of *Oxford*, and a member of that flouriſhing Society, *Magdalen* Colledge there, where he proceeded Doctor in a ſolemn Act in the year 1611, with two eminent Phyſicians his contemporaries, Dr. *Simon Baskervill*, and Dr. *Thomas Clayton*.

His correſpondence was good with *Jorden*, being both at one time practicioners on the place, as appears from the verſes he hath prefixt to Dr. *Jorden* in *Laudem operis*. He had only one Daughter, who being married out of this place, cauſed his

Name to be extinct here, lying buried in the North Isle of the Abbey Church in *Bathe*, and deserv'd a better Epitaph than this *English* Inscription cut round the Stone that lies over him:

Here lieth the Body of Edward Lapworth, *Doctor in Physick, who deceased* 24 *of* May, An. Dom. 1636.

His age I guess was near 60. As to his gifts of Mind they are doubtless beyond exception, having been so well educated, and a professour, if I mistake not, in *Oxford*, which gave some interruption to his practice here; being in body not tall, fat and corpulent, which inclin'd him the more to take his ease.

6. Doctor *Tobias Venner.*

DOctor *Tobias Venner* was born at *Petherton* near *Bridgwater* in the County of *Somerset*, of honest Parents, who sent him to *Oxford*, where he was made Doctor in Physick to the great repute of his own family, and *Alban Hall*, in the year 1613. He lived many years at *Bathe*, and had the Name of a plain, charitable Physician, but no ready man at stating a Case, which occasion'd one, a little tartly, to say, *That whereas some other men had,* (according to the common Phrase) *Guts in their Brains*; *Dr.* Venners *Brains were in his Guts.* However he found the right way to write a book called *Via rectâ ad vitam longam*, wherein is this memorable Observation, *That a Gammon of Bacon is of the same nature with the rest of the Hog.* He wrote also a little discourse of *Bathe*, thereby expressing

V.R. *ad* V.L. p. 59. l. 8.

preſſing his good will to the Waters, which had it been bigger he ſhould have had more thanks, but being very ſmall, muſt be contented with the like commendation.

He lived to ſee both his Wives, and all his Children die before him, and left his Eſtate to the Relations by his ſecond wife now in *Bathe*:

The Aſhes of this grave,
No Phœnix, but Chimæra gave, A Riddle.
The Head, the Feet, about the Thigh,
A Duck, a Mouſe, a Butterflie.

I can give no better account of him than a Friend of his hath done in this *Epitaph*, to be ſeen engraven in a Marble Table, in the middle of a maſſie Monument of Freeſtone againſt the Eaſt Wall of the South Iſle, in the greateſt Church of *Bathe*, under his Effigies in this manner.

SISTE VIATOR
PAUCIS TE VOLO
JUXTA HIC SITUS EST VENNERI VENERANDUS CINIS
INTER MORTUORUM CLAUSTRA MORTUUS JACET
MAGNUS MODO MORTIS ANTAGONISTA
DOCTOR ET DECOR MEDICINÆ
CUJUS SUPERBIAM NON FORMIDABANT ÆGRI
UTI NEC CONCULCABANT FACILITATEM
AUXILIUM ENIM

NEC

NEC SORDIDE OBTULIT

NEC FASTIDIOSE NEGAVIT

IN HOC CONVERSATIONIS SUAVITATI

IN ILLO PROFESSIONIS DIGNITATI

PROSPICIENS

PAUPERUM ET DIVITUM MEDICUS

HORUM QUOD MEDICINAM

ILLORUM QUOD CHARITATEM

SOLUS HIC TAMDIU EXERCUISSET

HORUM QUIDEM OMNIUM APPLAUSU

ILLORUM CIVITATIS HUJUS DELECTU

NEC PLUS DEFUIT SANIS QUAM ÆGRIS PAUPERIBUS

MANU NON PARCA EXHIBENS

HIS MEDICINAM

ILLIS ALIMONIAM

VIAM RECTAM AD VITAM LONGAM

NON MONSTRAVIT MODO SED ET PERAMBULAVIT

THEORIAM UNIUS ANNI CONFIRMANS PRAXI 85

TANDEM ITINERANDO DEFESSUS DISCUBUIT

ET IN HOC DORMITORIO OBDORMIT

GRATA MEMORIA DIGNISSIMUS

DOCTOR TOBIAS VENNER

QUI

NATUS PETHERTONIÆ

EDUCATUS OXONIÆ

OBIIT BATHONIÆ

MART. 27.

1660.

The Author of this Epitaph, for who made it is uncertain, ſeems rather to me to have been a Divine than a Phyſician, for which conjecture I have theſe Reaſons:

1. That the form thereof is borrowed from one made on Doctor *Daniel Featley*, now in *Lambeth*, as I could clearly make appear by comparing the Expreſſions, as I have ſometime done, and for the ſatisfaction of any that deſire it, may without a journey thither, be read, *mutatis mutandis*, in Doctor *Featley's* Book againſt the Anabaptiſts, where it is copied, and whence it was probably taken. Now a Phyſician, I conceive, would never have taken pattern from a Divine, to make an Epitaph on his own faculty, which is proper for a Divine, being more his concern.

2. *Venerandus* is a word ſuiting better with a Divine, and a more proper Epithete than for a Phyſician, as *Reverendus & Venerabilis*; and is moſt likely to have come from one whoſe tongue was tipp'd with ſuch language, who would rather chuſe to run the riſque of an impropriety in ſpeech, than loſe the honour of a jingling quibble.

3. 'Tis probable this Epitaph was made near a Church, and that either when the Bells were going,

ing, or else in imitation of that sound, as may appear from the Chime of *Hoc* and *Illo*, *Horum* and *Illorum*, *His* and *Illis*, with the great pains taken to observe the Cadences so exactly as is done.

4. In the fourth place, the word *plus* is somewhat suspicious, by which we must understand *Minus*, otherwise, *Nec plus defuit sanis quam ægris pauperibus*, may bear this sense, and not well any other, *that the Doctor was wanting both to the one and the other*, when the Author, I suppose, meant *he was wanting to neither*. Now *Plus* is a fit word for a divine, and might the sooner have been made choice of for this, that 'tis the origin or source of the word *Plurality*.

Fifthly and lastly; No Physician would have used that Expression, *Theoriam unius anni confirmans Praxi* 85, by which Doctor *Venner* is made a Practicioner from his Mothers womb, and longer a Physician than St. *John Baptist* was a Prophet, which in it self being somewhat harsh, though taken in relation to his course of life, where the life of that expression lay, can proceed from none but a Divine, who oftentimes will be nibbling at Physick.

Again, for I reserved something for a second part, That expression is justly liable to exception, *Quod Charitatem solus hic tamdiu exercuisset*, wherein Dr. *Venner* is made the only Charitable person in *Bathe*, whereas there were then living, besides some Charitable Inhabitants of another stamp, three or four more Physicians there, whose Charity, though perhaps not so rampant as Dr. *Venners*, was enough both in food and Physick to call the truth of that expression into question.

And

And although this necessary requisite to every good Christian that is in a condition so to do, be not with that ostentation put into the Epitaph of Dr. *Bane*. Yet I have heard a good Character of him also in this kind, and do know many poor persons now alive in *Bathe*, that will affirm they have received good Alms and Physick too from his Charity. I confess *Tamdiu* may do some service here, to this effect, that Dr. *Venner* vvas the only man that was charitable here so long, which, though it may abate somewhat, doth not take off the arrogance of *Solus*, which, like the Sun, never appears without reflection. I vvrite not this to derogate from Dr. *Venner*, or disparage the Epitaph, having that esteem for both they do deserve; but as the Devil, we say, should have his due, so I think, 'tis not fitting a Saint should have more. And thus much for the Charitable Dr. *Venner*.

7. Dr. *Ralph Bayly*.

DOctor *Ralph Bayly*, of whom I am next to treat, was well known to all his Collegues of *New-Colledge* in *Oxon*, where he had his Education, to be as stout a man as that Society hath yielded, having in his Temper an equal mixture of *Mars* and *Mercury*, or rather, born under the *prædominium* of *Mars*, as he hath often evidenced when he long'd for Venison, though sometimes bought at a dear rate.

Doctor *Bayly* was born in *Berkshire*, descended of a good Family in that County, whose Coat-armour is, *In a field Gules, three Martlets*, or, *A Chief Vairy Argent of Azure*. Having spent some time in *Winchester* School, that fruitful Seminary of Learn-

Learning, he was in due time transplanted to *New-Colledge* in *Oxford*, where he gradually proceeded with good applause, till he arrived at the perfection of Doctor of Physick, which hapned in the year 1618. By two Wives, the one a *Quintin*, the other a *Hungerford*, both comely Women; he had issue both Male and Female.

His eldest Son *Walter*, my intimate friend and acquaintance, he educated in the University, in *Magdalen* Hall in *Oxford*; but finding his genius not so much inclining him to Learning, though he was a great admirer of it, and had much respect for any Scholar that was truly so, and had Learning enough himself to render him facetious, and as good company as any man could wish; finding, I say, his genius not so much bent to study, he rather chose a gentile Education, and being very acceptable to all persons of Quality, especially the Gentry of *Hampshire*, in particular Sr. *Richard Gifford* of *Sumburne*, *Henry Ludlow* of *Tadley* Esquire, and many others, where he used to hunt and recreate with all the kindness imaginable; at last, on the death of his Father took to the Estate, and settled at *Bathe* in the same house the Doctor enjoy'd, where he lived plentifully many years, and saw an end of all his Generation, till at length, for Death is the end as well of the good Companion as the Sot, of a lingring distemper, being much obstructed in the Mesentery and Urinary passages; he ended this life about the sixtieth year of his age, on the 15 day of *November*, *An. Dom.* 1672, and is buried in the Abbey Church in *Bathe*.

Doctor *Bayly* is further remarkable in this, that he is the only man save one, of any Physician that lived here; that had a Son of his own Profession, which was Mr. *Thomas Bayly*, by his second Wife Mrs.

Mrs. *Hungerford*, an Ingenious man, and good Physician, of whom his Brother would often speak with much affection and respect, who in the beginning of the Wars, when no Acts were kept, was with many others, created Doctor *An. Dom.* 1642, and practising at *Newbury* in *Berkshire*, with good success and reputation, died of a high infection in the prime of his years, not long after. He was much encouraged to the Delivery of Women, being fitted for that service both by art and nature.

It is also further observable in Doctor *Ralph Bayly*, that although he had good practise, and prescribed to many Patients, yet such was his good Temper of Nature, and Temperance withal, that he never took any Physick himself, or made use of the Bath, being never sick in all his life; which fell the heavier on him, according to the vulgar observation; for going from his house at *Bathe* to another he had at *Widcombe*, a mile distant, he was suddenly taken with a great faintness, insomuch as he was constrained to call at a Neighbours house before he came to his own, to desire something to refresh him, using these words, *as God shall mend me*, which was his usual saying, *I am ill*, and presently departed, and was buried at *Widcombe*, Nov. 16. 1645.

He was a proper, Comely person, charitable, and well read in the Ancient learning, witness a good Collection of old Authors, well markt with his own Hand, now in my possession. And so much for Dr. *Ralph Bayly*, being the only man, I think, that ever liv'd and dy'd without pain.

8. Sr. *Edward Greaves.*

Doctor *Edward Greaves* ought alſo to have a mention here, having ſometime liv'd and practiſed in this place (to which he hath relation yet) till his deſerts preferr'd him to what he now enjoys, concerning whom, to avoid the imputation of flattery, vvhich I ever hated, I ſhall ſay no more, than that he is full of Honour, Wealth and years, being a Baronet, one of the Colledge of Phyſicians in *London*, Phyſician in ordinary to his Majeſty, and 35 years Doctor in Phyſick, which he took being Fellow of *All-Souls* Colledge in *Oxford*, *An.Dom.* 1641.

9. Doctor *Samuel Baue.*

With Doctor *Baue* I had the happineſs to have a particular acquaintance, being the eldeſt Phyſician on the place at my coming hither, in the year 1667, and although many things are obſervable in his life and practiſe, having lived to ſee compleated fourſcore years, yet I ſhall contract my ſelf as much as may be, in regard I would not be tedious in a thing that ought to be brief.

Doctor *Baue* was born in the remarkable year 1588, at *Colen* in *Germany*, of a good Family, as appears by a good Coat of Arms brought thence, vvhence he came young for *England*, on occaſion, as he told me, of his being Tutor to Sr. *Thomas Edmond*'s Son, which Sr. *Thomas* vvas Ambaſſadour from

from King *James* at *Paris*, where Mr. *Bane* was then a Student, in which Family, and about the Court, he continued some time with an honourable allowance from the Knight, but chiefly bent his studies to the faculty of Physick, in order to which he afterwards became a Member of that great Body and famous Society of *Christ-Church* Colledge in *Oxford*; where he proceeded Doctor in Physick in the year 1628, with three other Physicians that went out with him, *viz.* Dr. *Taylor*, and Dr. *Speed* of St. *Johns*, and Dr. *Saunders* of *Oriel*, at a very splendid Act.

The first beginning of his publick Practise was at *Glocester*, being invited thither by one *Whittington* an Apothecary, where though his condition could not be expected to be extraordinary, having no Natural, but acquired Friends in *England*, yet in time he made his own fortunes, and so well improv'd his small Talent at first, as to leave behind him, besides what he parted with in his life time which was not inconsiderable) the best estate of any Physician that died in *Bathe*. And I have often heard him bless God for that good success he had given his undertakings, and the prosperous condition he had brought him to, not without a modest humble reflection on what no man had any reason to be asham'd of, in the words of good Old *Jacob*, in the like condition, *With my staff have I passed over this* Jordan, *and now the Lord hath made me many bands.* Which is more than many men have said, that have been raised to greater Estates by less skill or pains, it being no disparagement to any man to have a beginning since none but God but had so; and a gatherer, though the first rise of a Family, is much better than him that scatters through many Generations.

After he had been some time in *Gloceſter*, his Parts and Learning procured the good opinion of Alderman *Robinſon*, a wealthy Citizen, and Counſellor at Law, whoſe Daughter he married, with whom he lived many years, and had Sons and Daughters. From *Gloceſter* he removed to *Bathe*, about the year 1640, where practiſing with admirable ſucceſs, for near thirty years, and maintaining a mighty riding practiſe, died in a good old age, in his eightieth year, as may further appear by this Epitaph I cauſed to be engraven in Marble on a handſom Monument, erected by his Wife Mrs. *Heſter Baue* in the South Iſle of the Abbey Church, as followeth:

P. S.

QUISQUIS ES

QUI NON FASTIDIS CADAVERIBUS INTERESSE

NEC FUNCTORUM VITA QUICQUAM TIBI EST MOLESTA (MEMORIA

SCIAS VELIM

JUXTA CONDI BEATAM RESURRECTIONEM MANENS

QUICQUID ERAT MORTALE

SAMUELIS BAUE

MEDICINARUM DOCTORIS ET IN HAC CIVITATE HAUD (ITA PRIDEM

PRAXIN EXERCENTIS

MAJORI FELICITATE AN SEDULITATE INCERTUM

MORBORUM PERDUELLIS, FACULTATIS VINDICIS, EMPI- (RICORUM MALLEI

QUEM

COLO-

COLONIÆ AGRIPPINÆ NATUM

ET IN VARIIS ACADEMIIS IN QUIBUS OXONIA EDUCTUM

GLOCESTRIA PRIMITUS EXCEPIT DEIN BATHONIA

UBI

POSTQUAM PER ANNORUM PRÆTER PROPTER XXX. (CURRICULUM

NON SINE MAGNO FAMILIARIS REI INCREMENTO

NEC MINORI ÆGROTANTIUM TAM EGENORUM QUAM DI- (VITUM LEVAMINE

MEDICINAM FECISSET

ET DE MORBIS CUJUSCUNQUE GENERIS TRIUMPHOS (EGISSET

TANDEM

HUMANÆ SORTIS MISERIAS PERTÆSUS

MORTI ULTRO SE TRADIDIT

AC

ÆTERNIS BEATITUDINIBUS FRUI EXOPTANS

CARNIS EXUVIAS LÆTUS DEPOSUIT

ET

MORTALITATI NON VITÆ VALEDIXIT

Vto. DIE AUGUSTI

ANNO ÆRÆ CHRISTIANÆ

M DC LXVIII.

ÆTATIS SUÆ

LXXX.

OBDORMIUNT ETIAM NON PROCUL ABHINC
DOCTORE PRÆDICTO ET ESTERA UXORE EJUS ORIUN-
(DUM
DUPLEX PAR
MASCULUM UNUM ALTERUM FOEMINEUM
MAJOR NATU MARIA RIDLEY MINOR ESTERA BARNES
JOANNES INSUPER ET FRANCISCUS UTERQUE COELEBS
VITAMQUE JAM UT SPERATUR AGENS
VERE COELESTEM.

He was beſides an able Phyſician, well verſt in the *High-dutch*, *Low-dutch*, and *French* Tongues, but above all eminent in the *Latin*, which he wrote and ſpake very fluent and proper.

He met with no kind uſage toward the latter end of his daies from one whom he had formerly ſufficiently obliged, who, becauſe I hope he hath or may live long enough to repent his unhandſom carriage to him, and ſome others of the faculty, ſhall only here be markt with the Letter, *I. F.*

He had an excellent memory, and ready invention, inſomuch as having much buſineſs, and uſing two *Amanuenſes*, he would write himſelf, and dictate to the other two, at the ſame time, in ſeveral Languages.

He was alſo very happy in, the glory of a Phyſician, the Cure of Chronical diſtempers, which he effected chiefly by Chalybeat Medicines, which, he was wont to ſay, were as true as Steel; but a little too much addicted to the vanity of *Noſtrums*, which he being many times unwilling to diſcover, cauſed ſome diſlike on conſultation with others.

He

He was by Nature not so affable, but somewhat morose, and hated an Emperick, though made use of his Medicines. In short, He was an industrious man, an able Physician, and much in the favour of that great Physician of his Time Sir *Theodore Mayern*, between whom many Letters passed, on Commendation of Patients, chiefly French. And so I pass on to Dr. *Maplet*.

10. Dr. *John Maplet*.

DOctor *John Maplet* was born in *London*, bred at *Westminster*-School, and afterwards removed to *Christ-Church* in *Oxford*, where he was first Proctor of the University, then Doctor of Physick, in the year* 1647. and after that Principal of *Glocester-Hall*; a man well accomplisht as a Gentleman and a Scholar, meek, sober, and temperate, beloved and respected by all that knew him.

* when he had his Grace, but kept no Act till 1654.

While he was in the University, he had an opportunity by accompanying the Lord Viscount *Falkland*, to whom he was Tutor, to Travel, and accordingly went in the year 1650. into *France*, where he continued near two years, chiefly at *Orleans*, *Bloys* and *Saumur*, and made many Observations on those Countreys, which he committed to Writing in a neat and curious Hand, in some Epistles now with me, with a particular Tract of his Travels, in an elegant Latin Style, which I may sometime or other make publick, and do further right to the memory of this Worthy Person.

A second time he Travell'd into *Holland* and the *Low-Countries*, with my Lord *Falkland*, then Viscount, on the death of his elder Brother, whom before he had accompanied into *France*, the young

Lord *Scudamore*, and Sir *Henry Jones*, who loſt his life by an unfortunate Shot at the late Siege of *Maeſtricht*, and at his return, or ſhortly after, married Mrs. *Anne Hull* of *Briſtol*, where he uſually practiſed in the Winter time, and at *Bathe* in the Summer.

And although he left a good Eſtate, conſidering the ſmall time he had for practice, dying not old, and ſpending much of his time at firſt abroad, yet I muſt ſay, he had no right done him, by one that pretended much kindneſs to him, on whom, to my knowledg, he had reaſon to depend, and whom he not only courted and honoured as a Patron, but had almoſt the ſame Reverence for as for a Father, as doth appear by that Volume of familiar Latin Epiſtles, I have by me directed to him for the whole ſpace of 16 years, *viz.* from the year 1650. in which he travell'd, to the year 1666. But ſeeing that Cunning Fox is now earth'd, I ſhall not dig after him; but proceed to ſome other Particulars, of no Vulpone alike under ground.

D. *Wall* of *Chr. Ch. Oxon.*

He was of a tender, brittle Conſtitution, inclining to feminine, clear skin'd, and of a very freſh Complexion, and though very temperate, as I ſaid before, yet inclinable to Rheumatick Diſtempers, chiefly Gouts and Catarrhs, which would oftentimes confine his Body, but not his Mind, which was then more at liberty to expatiate, and give ſome invitation to his Poetick Genius, which was very good, to deſcant on the Tormenter, and tranſmute his Sorrow into a Scene of Mirth. I ſhall mention one or two out of the Manuſcripts I have, becauſe Ingenious and ſhort.

The

The firſt is,

De Catarrhi *in oculorum alterum defluxu ad Amicum ſingularem D.* D. Wall.

Spongia præmadidi collis mihi clauſa cerebri eſt,
Expreſſoq; oculum degravat imbre meum;
Omnis ab infuſo turgeſcit Venula ſucco,
Nec ſiccum hoc aqueo cernis in orbe locum,
Ingratum Phœbi lumen: tranſire feneſtras
Auroram roſeo nil juvat ore meam.
Nil juvat in foculo liguorum lucida Strages,
Pyramideſve altæ quas ſibi flamma facit.
Nil florum ſplendor: ſpecies nil pulchra colorum,
Hos ſi vel proprio fundis ab ore, Venus.
Delicias oculo facitis qui forte ſerenat,
Cui gratum eſt quicquid, dum micat ipſe, micat:
Sed pluvias, & acre ſerum immingente Catarrho,
Solamen Tenebræ lumine majus habent,
Defluvium pacant quæ ſunt expertia lucis,
Ni tamen è vultu lux ruat illa Tuo.
Nam de Te radius mulcet fulgore Catarrhum,
Opticus & mihi quem fronz Tua vibrat, erit.
Sufficit in reliquis obſcuræ noctis imago,
De Te ſed veniet quæq; ſerena dies.

Another is,

De Catarrhi *Fugâ.*

Fare, ubi diluvium est? mihi tandem exaruit orbis,
Absumptasq; suas continet amnis aquas.
Ordo Naturæ rerum & Simulachra recurrunt,
Et minimas atomos ficca pupilla capit.
Non fontem, sed pumiceum jam cernis ocellum,
Et Victor lachrymis fræna dat ille suis.
Splendore ingenito lucet Chrystallina sedes,
Cui fuscam ecclipsin guttula nulla parit.
Jam licet immittas, oculorum Phœbe, fenestris
Te totum, Sphæra est illa, vel illa, capax.
Pulchra veni, si quando lubet, Tu Flora, colores,
Seu facies istos, seu Tuus hortus alit.
Nil jam divinum lumen, jam palpebra nullum
Excludit, mihi Nox atq; Catarrhus abest.
Plus tamen hoc gratum est quod non circumfluit humor,
Vultum qui possit dimidiare Tuum.
Nam mihi quem lippo referebant vivida vela,
Integer haud fuerat, pars erat illa Tui.
Te fruor, atq; oculi speculo. sed dulcius illud
Quam speculi, quod pars perdita nulla Tui est.

The

The good Doctor was very sensible of his approaching end, and well knew, that all the props of Art were too weak to support his crazy Temper, and therefore was not of the number of those that are blamed for having gray hairs creeping on them, but not regarding it; for he made these Excellent Verses *In Primam Canitiem*, which shall be the last of his I shall mention here.

Humida jam Nivibus spargunter Tempora primis,
Et fuscam intingunt albida fila comam.
Sentio quam tacite non intellecta Senectus
Obrepit; nos Ver credimus, instat Hyems.
Hæc si tardescat, mox infert Cura senectam,
Mensq; dies citò quod non facit, ipsa facit.
En quoties morimur? succos sive exedit hora,
Sive hos degeneres turbida Cura parat.
Grata mihi veniunt tamen hæc præludia fati,
Morsq; his primitiis, quàm ferit, ante monet.
Respicias animum, Tibi det Prudentia canos,
Atq; annos Virtus præeat alma tuos.
Hoc decet, hoc pulchrum est, atq; hoc canescere divum est,
Fœdus erit canus Vertice, mente Puer.

I have not adventured to Tranſlate the two former Copies on the Catarrh, in regard I think they cannot be ſo aptly expreſſed in any other language, thoſe Verſes, as many others, ſounding beſt in their own words; yet as a foyl to the Doctor's Jewel, to render it more radiant, I have attempted a Tranſlation of the laſt, thus:

On the Firſt gray Hairs.

On Temples moiſt firſt Snow is ſhed,
Twiſt, brown and white, is on my Head;
Old age creeps on, that Silent Thing,
Winter's at hand, We call it Spring.
If this delay, Care brings on age,
And thoughtfulneſs prevents Time's rage.
How oft we die? whe'r Time devour
Or Toilſome Care our Juyces ſour.
Welcome theſe Monitors of Death;
Death ſtops not now, but warns, my breath.
In prudent mind ſee Thou be ſage,
Let Virtue older be than Age.
Thus to be gray is meet and good,
For God grows gray thus underſtood;
And 'tis indecent to behold
A Boyiſh Soul, a Body old.

His

His Body being macerated by a weakneſs of the Tone of all the Parts, by degrees languiſhed to that meaſure, that confined him for ſome few days to his Chamber and Bed, and a flux of blood ſupervening from the Hemorroides, which, though ſtopp'd in time, gave him little hopes of recovery, and therefore after the uſe of many means in vain attempted, he reſigned himſelf to death, which in a ſhort time enſued.

One thing I muſt remind, as an argument of his Contentedneſs to leave this World, That after my ſelf, and Mr. *Rob. Chapman* his Apothecary, who attended him in his ſickneſs, had left him, and taken our leaves of this dying Friend, an Eminent Phyſi- *Sr. R. N.* cian of his former acquaintance coming accidentally to Town, and hearing the Doctor was ſo dangerouſly ill, made what haſt he could to pay him his reſpects, and enquiring of Mrs. *Maplet* how the Doctor did, and ſhe replying, without any hope of Life, he, in kindneſs, ſaid, *If he were not dead, he would do his utmoſt endeavour to recover him*; and deſired her to acquaint him with as much, which ſhe did; but the Doctor replyed in his modeſt manner, *Pray remember my Service to Sr.* Richard, *and let him know that I thank him for his viſit, but am paſt his cure and any body's elſe, and ſhall take it as a kindneſs, if in the condition I am now in I am not troubled*; and the ſame night parted with this Life for a better, according to the Motto of the Rings at his Funeral, *Morior ut vivam.*

He wrote ſeveral Latin Epiſtles, in which he had a ſingular faculty, (which, with ſome Poems, and a few Obſervations, were the greateſt part of his Writings he left behind) as well to the moſt Eminent Sir *Alexander Fraiſer* Knight, and Principal Phyſician to his Majeſty, his Learned and good

Friend

Friend Sir *John Baber*, with whom he had an intimate acquaintance, Sir *Francis Prujean*, Dr. *Bate*, Dr. *Meara*, Dr. *Nedham*, and others at home, as also to some abroad, particularly Dr. *Neal* of *Leedes*, and Dr. *Bennet* of *Saumur*, where he was very sick, and recover'd from an imminent danger of death, by the help and assistance of this Physician, as he most pertinently expresst in one Epistle, in which are these words; *Sed & Silente illa Comitatis Tuæ voce, resuscitata Mihi Tua ope Sanitas, ad hoc scribendi officium, nullo etiamsi alio devinctum nomine, adegisset, ut qui fuerit conservatum Corpus, Corporis saltem pars manus recognosceret. Per Tuam scilicet Apollineam manum, in suo refloruit domicilio, robustus ille vigor, quo itinerum aut suscipere labores, aut perferre debueram.*

I shall end the Life of Dr. *Maplet*, with one expression of his kindness to me, and another of mine in return to himself.

The first is, That on the setting up of Dr. *Bave*'s Monument, there having been some envious spirits that rais'd a discourse to the disparagement of that Epitaph, I was constrained to appeal to this Worthy Judg of Learning for a Censure, which I did in these words. *Censuram Tuam, Vir Doctissime, de hoc Epitaphio liberam & vere criticam peto obnixe; Utrum Prisciani, ut dicitur, Capiti vulnus aliquod sit inflictum, quemadmodum Tenebrio quidam anonymus, cui sinciput uti suspicor, parum sanum est, deblaterat, fac ut sciat Tui Observantissimus.* To which the Candid Doctor returned this answer; *Cur dicam Tibi Epitaphii hujus causâ scribat ullam, aut ferulæ plagam cur jubeat retribui, ob vulnus aliquod in Capite suo inde acceptum, omnino non habet Priscianus. A Tuo, ut ab Eruditorum calamis solet, illæsus permanet, debitoq; fruitur honore; si vero Beati-*

atitudines in plurali, apud authores politos infrequentius legamus, haud ideo in Grammaticen peccatur; sed & isti numero Hebræorum idioma de Cælesti loquentium felicitate, quod Te callere scio, forte favet. Ecce quam libere Tecum & sincere, prout ipse jubes, ago; quod ipsum amoris studiiq; erga Te mei certissimum quoddam pignus esto. Tibi dedissimus.

The other I call a kindness to Him, is an Epitaph much short of his desert, now standing in the North-Isle of the Abbey Church in *Bathe*, which out of the great respect I had to the memory of my Worthy and Learned Friend, I presented to Mrs. *Maplet*, and is now cut in a black Marble Table well adorn'd, and set in the midst of a neat Monument of Alabaster, in these words:

CONDITUR

CONDITUR HIC

JOANNES MAPLET M. D.

TRINOBANTIBUS ORIUNDUS

ANIMI CORPORISQUE BONIS PRAEDITUS

ERUDITIONE MODESTIA ET COMITATE

PAUCIS SECUNDUS

ARTIUM ET SCIENTIARUM OMNIUM PANOPLIA IN-
STRUCTUS

REI AUTEM MEDICAE ADEO PERITUS

UT EXEMPLUM DESIDERETUR

PROFUIT QUIBUS POTUIT

OBFUIT NEMINI

ACADEMIAM PATRIAM OXONIENSEM

UBI PLURES ANNOS VIXIT

EXTERIS ETIAM NON INSALUTATIS

BATHONIAM ET BRISTOLIAM

UBI PARTITIS ANNI VICIBUS

FECIT MEDICINAM

NON MINUS VIRTUTUM SUARUM EXEMPLO, QUAM
PRAXI

HONESTAVIT

OBIIT

OBIIT PRIDIE NONAS SEXTILES

ANNO CHRISTI INCARNATI

MDCLXX

ÆTATIS SUAE

LV

CUJUS OSSA CUBENT MOLLITER.

His Wife also enjoying little health afterwards, being Paralytick and Convulsive, died Apoplectick, the 14th. of *February* following, only 6 months and 12 days surviving the Doctor, of whom, as also of two Children *John* and *Mary*, lying on both sides of the Parents, this remembrance may be seen in a little Marble Table under the former.

SEPE-

SEPELITUR ETIAM JUXTA

ANNA UXOR EJUS

SEX TANTUM MENSES ET DECEM DIES

MARITO SUPERSTES

OBIIT $\overline{XIV}$ FEBR. $\overline{ANO}$ DNI MDCLXX

ANNOS NATA $\overline{XXXV}$.

INTER PARENTES QUOQUE QUASI IN LECTO

PLACIDE OBDORMIUNT

CONJUGII SUI PIGNORA CHARISSIMA

JOANNES ET MARIA

HAEC TRIMESTRIS ILLE TRIENNIS

OMNESQUE

RESURRECTIONEM FELICEM

UNA EXPECTANT.

His

His ſtyle in Latin was terſe, his words choice, but his Periods a little too elaborate. And thus much for the Learned, Candid, and Ingenious Dr. *Maplet*, a good Phyſician, a better Chriſtian, and an excellent Poet.

On *Themiſon.*

WHen many Autumns *Themiſon* had paſt,
He Maſter of a great houſe was at laſt;
Another paſſing by, and viewing it,
Said, *Here's a great head, but, pray, where's the wit.*
The Houſe was great, the Furniture but ſmall,
The Head had skull, but had no brain at all.

Ultimus hic ego ſum, ſed quam benè, quam malè, nolo
Dicere, de me qui judicet alter erit. D. Johnſon de Seipſo.

I am the laſt, but whether Bee, or Drone,
Anothers pen ſhall write, and not my own.

Others alſo there were good Practitioners on the place, though not of that degree. The firſt of which is;

Mr. *Thomas Leyſon.*

THis Phyſician was a *Welchman*, but of what County in *Wales* I know not; a man of a good repute, and eſpecially taken notice of for his Charity to the Poor. He is as remarkably commendable for his kindneſs to his Wife, who lies buried in the Pariſh Church of St. *James* in *Bathe*, with this Epitaph made by himſelf in Braſs againſt the Wall, under the Eaſt Window, which, becauſe a rare inſtance of Affection, I ſhall mention here, and for the further propagation of the kindneſs of this *Welſh* Love, ſhall tranſlate into our own language.

The Latin Verſes are theſe:

TKiſtia quæ Uxori mœſtus Tibi carmina pono
Quam vellem nimium Te potuiſſe mihi?
Septem annos (ſic velle Dei eſt, ſed nolle Parentum)
Et ſine Connubio mutuus arſit amor.
Bis ſeptem ſine lite ulla ſimul egimus annos,
Diſjungi & mortis Lis mihi prima Tuæ eſt.
Sola meos Tu, habuique Tuos ego ſolus amores,
Quos habet atque habeat debinc Libitina Tua.
Tecum ſemper eram viva, defunctia ero Tecum,
Nunc animo, & dum mors junxerit atra duos.
Namque iſtâ (cum fata vocant) dormire ſub urnâ
Deſtino, propitius det mihi vota Deus.

Tho. Leyſon Vir mœſtiſſ.
Mariæ uxori poſuit
1599, Apr. 15.

The

The Translation thus:

THese Verses thus in grief made on Thee, Wife,
Would Thou hadst made on me to save thy (life.
Seven years (so long did friends cross heavens will)
We lov'd and lik'd, but at a distance still.
Twice seven years more we liv'd in love together,
Serene and calm, Thy death first brought foul wea-(ther.
Thou hadst my Loves alone, I only Thine,
Which now unto Thy Ghost I do consign,
Alive was with Thee still, dead will be so,
In mind at present, till in Body too:
For when God please, I'll rest too in Thy grave,
From whom this boon in mercy now I crave.

Tho. Leyson in much grief made this on Mary his wife, 1599. Apr. 15.

This Mr. *Leyson* writ a Latin Poem, in which was contained the description of the Ancient Seat of the as ancient Family of the *Stradlings*, called St. *Denets* in *Glamorganshire*, which, the laborious and learned *John David Rhæsus*, that took so much pains to so little purpose, in the Epistle Dedicatory to his *Latin Welsh Grammar*, written to Sr. *Edward Stradling*, affirms he saw, and turned into *Welsh*, giving it the commendation of *Venustum Poema*, and He the title of, *Vir cùm rei medicæ, tùm Poetices peritissimus*. He died in *Bathe*, and, as far as I understand, had his desire, expressed in the two last verses on his Wife. The time of his death is uncertain, being not entred in the Register.

John Vincentius Oſtendorph.

OF this Phyſician I can give no other account than that he vvas a *German*, and like *Field-fares* and *Wind-thruſhes* did change his climate for better food, which he liked ſo well that he married here one Mrs. *Cavell*, Siſter to an Ingenious Limner of that name, and after ſome years practiſe, died, and was buried in the Abbey Church in *Bathe*, the 12*th*. day of *April*, *An. Dom.* 1648. I have mentioned him in this place, becauſe if a Doctor of Phyſick it was beyond Sea, of which I have not aſſurance.

Mr. *John Dauntſey.*

MR. *John Dauntſey* was a Gentleman of a good extraction, and younger Son, as I have heard, to a Knight, who having been bred a Scholar, was encouraged to the practiſe of Phyſick by Dr. *Jorden*, for vvhom Mr. *Dauntſey* had a great eſteem, as appears by his Verſes on Dr. *Jorden*'s Treatiſe. He vvas a man of great integrity, but made no conſiderable advance in the World. He died ancient near 80, in the year 1650, and vvas buried in the Abbey Church, *Febr.* 12. He married a Gentlewoman of a good family, one Mrs. *Winter*, by whom he had beſides other Children, Mr. *John Dauntſey* his eldeſt Son, who practiſed Phyſick with good ſucceſs in *Briſtol*, and died lately; and another now living a Chirurgeon.

There

There was an Epitaph made on him by one known by the name of Dr. *Somerschall*, a Chymist, who if no better Chymist than Poet, was never like to attain the liquor *Alkahest*, or the Philosophers *Arcanum*, which, because I am inform'd, it was put on Mr. *Dauntsey*'s Tombstone by this Philosopher (of which I have seen some marks) I have through his means made so great a progress as to know where the Philosophers Stone is, though but little legible on it now, whereupon, as greater Chymists have been in this search, I was frustrated of my expectation; however the Verses were in part these, or to this purpose:

Here lies Doctor John Dauntsey *by name,*
Whose harmless life, whose Saint-like death, whose lasting fame
With judgment good in Physick lore,
Approved to posterity shall this engraving over last evermore.

Mr.

Mr. *Thomas Brewer.*

MR. *Thomas Brewer* was born in the County of *Somerſet*, where there are now of that name related to him, of good Eſtates; an induſtrious man, a good Scholar, and expert Phyſician, as I have underſtood by his preſcriptions. He was well acquainted with the Greek and Latin Tongues, and excellent in the former, which is ſo rare among many pretenders to the faculty now, that *Græcum eſt, non poteſt legi*, may be made uſe of again, and therefore this inſtance of Commendation ought not to be omitted. He lived many years in good eſteem, and is buried in the Abbey Church with this Inſcription on a piece of braſs on his Tombſtone: *Here lieth the Body of* Thomas Brewer, *late of the City of* Bathe *Phyſician, who departed this life the third of* November, *An. Dom.* 1665.

Mr. *So-*

Mr. *Somerschall.*

AS a Conclusion, or Epilogue, I shall add the life of one *Somerschall*, a Chymist, mention'd before, who died in *Bathe*, after many projects, in a poor condition, which, in a merry riming humour, I thus suddenly wrote.

There dwelt a Chymist here of note,
That wore in Summer a furr'd Coat;
Who promising to make all rich,
Left not enough to cure the Itch.
Full glad was *Bathe* of such a guest,
And gave him room among the rest
That came to practise here, or try
What gain it was to multiply.
His tackling he together got,
To work he went, would do what not?
And sooner others to fetch over,
He wheedled in the Earl of *Dover.*
Both night and day the fire brent,
To bring to pass this grand intent,
Which was the thing aim'd at, I'm told,
To pave the streets of *Bathe* with gold.
But yet to compass this design,
There must before-hand be some Coin,
Which freely lent, on Reputation,
To pay, the *German* pawn'd his Nation.
A house was built fit for the work,
Where he in privacy might lurk,
As close as if made underground,
The mony went but nothing found,
For something still fell out to cross
The main, and multiply the loss.

At

At length, when nothing did appear,
And he had wrought this and that year,
Death seizeth on this Artist great
To try if he were not a cheat.
Unwilling he was sore to go,
And leave his work imperfect so,
But go he must; on which they mind
to see what pelf he left behind,
And find no Gold or Silver oar,
But Soot and Horsedung there good store.
His pockets searcht too were unwilling
To part with all they had, a shilling,
Which was too little judg'd by all
To pay the charge of's Funeral:
The boards of a poor Hut he built
Were sold to multiply the gilt,
To set the *Caput mort* in ground
Of this Philosopher profound.
Th'Apothecaries too, they say,
Were willing something to defray,
As part of what they got to boot
By sale of's famed Spirit of Soot.
Hermes his Bird went thus to rest,
Leaving a Feather in his nest.
On whom as on a broken staff,
I write this homely Epitaph:

Here lies the man, whom Bathe *did call*
By th'name of Doctor Somerschall;
Or, if you like this better, know it,
Here lies John Dauntsey's *famous Poet.*

THE END.